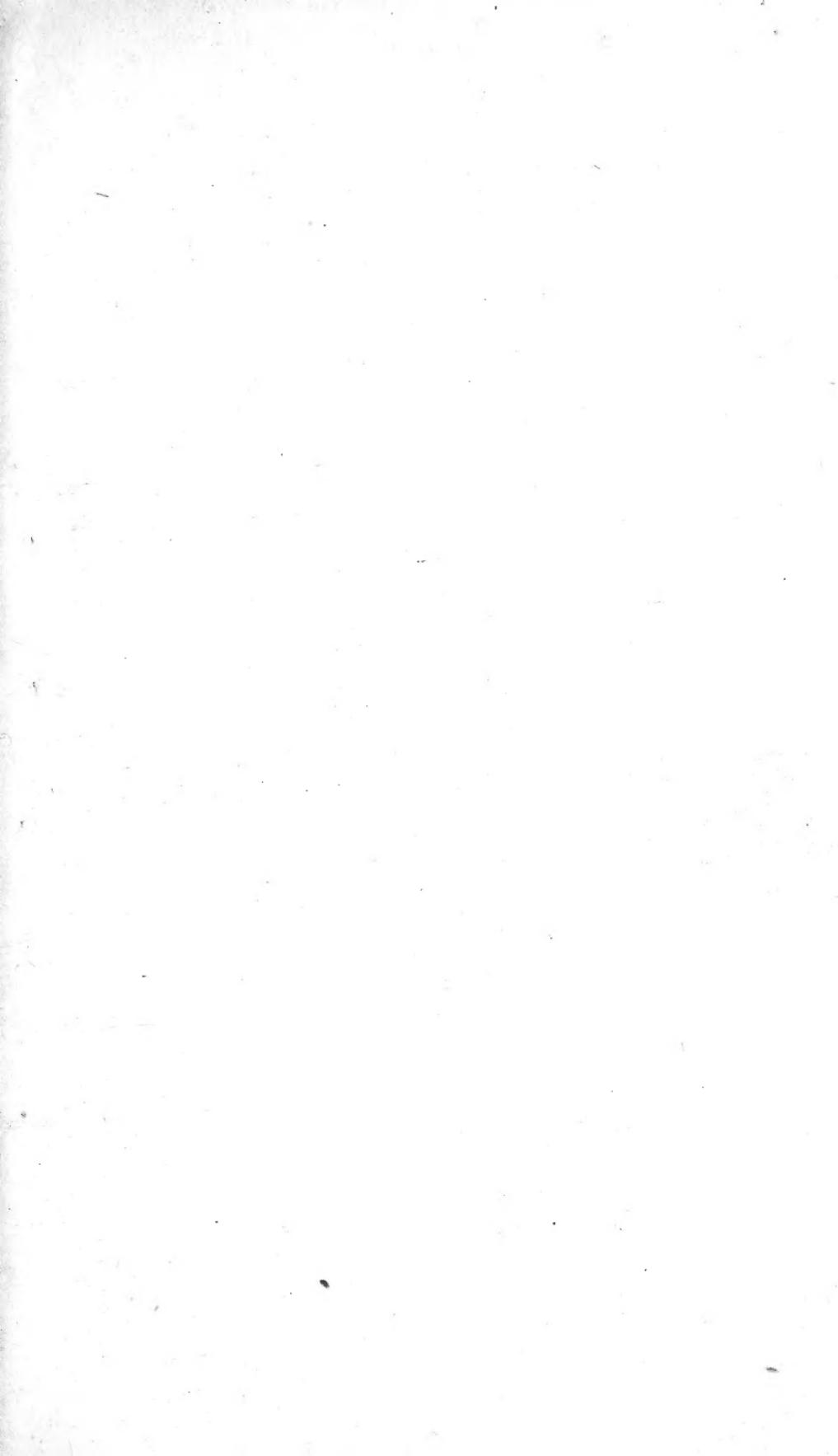


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Robert W. Chanler



REVERENDISSIMO IN CHRISTO PATRI,

JOANNI MOORE,

PROVIDENTIA DIVINA,

ARCHIEPISCOPO CANTUARIENSI,

ANIMI CANDORE,

INGENII SUAVITATE,

VITÆ INTEGRITATE

SPECTATISSIMO,

TERTIUM HUNC

NATURÆ VIVARII

FASCICULUM,

CULTU OMNI ET OBSERVANTIA,

D. D. D.

GEORGIUS SHAW,

FREDERICUS P. NODDER.

TO

THE MOST REVEREND FATHER IN GOD,

J O H N,

BY DIVINE PROVIDENCE,

ARCHBISHOP OF CANTERBURY,

&c. &c. &c.

THIS THIRD VOLUME

OF

THE NATURALIST'S MISCELLANY

IS,

WITH THE MOST PROFOUND HUMILITY, INSCRIBED,

BY

HIS GRACE'S MOST DEVOTED SERVANTS,

GEORGE SHAW,

FREDERICK P. NODDER.

QL
46
S53
1789
V.3
CHMRC

CERTHIA COCCINEA.



CHARACTER GENERICUS.

Rostrum arcuatum, tenui, subtrigonum, acutum
Lingua acuta.

Pedes ambulatorii.

Lin. Syft. Nat. p. 184.
Picæ.

CHARACTER SPECIFICUS, &c.

CERTHIA COCCINEA, alias caudaque nigris,
rostro pallido.

CERTHIA COCCINEA.

Gmel. Syft. 1. p. 470.

CERTHIA VESTIARIA.

Lath. Ind. orn. p. 282.

Certhia Coccinea, in insulis Sandvicensibus copiosissima, rostrum gerit prælongum, incurvum et pallidum : tota avis coloris est læte rubri, exceptis alis caudaque nigris : tabula illam exprimit magnitudine naturali : interdum utrinque juxta humeros macula alba conficitur.

Day

211



London: Printed by T. & J. Wall, 19, Strand, 1829.

THE
SCARLET CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, sharp pointed.

Tongue differing in shape in the different species.

Legs moderately stout.

Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnæus. Latham. Pennant.

SPECIFIC CHARACTER, &c.

SCARLET CREEPER, with black wings and tail, and pale bill.

HOOK-BILLED RED CREEPER.

Lath. Synops. 1. p. 704.

The Scarlet Creeper is a native of the Sandwich Islands, where it is extremely numerous. The bill in this species is very long, hooked, and of a pale colour. The whole bird is of a vivid red, except the wings and tail, which are black. In some individuals a white spot appears on each side the shoulders.

RANA CORNUTA.



CHARACTER GENERICUS.

Corpus tetrapodum, ecaudatum, nudum.

Lin. Syft. Nat. p. 354.

CHARACTER SPECIFICUS, &c.

RANA PALPEBRIS CONICIS.

Lin. Syft. Nat. p. 356.

BUFO CORNUTUS s. Spinosus Virginianus.

Seb. 1. t. 72. f. 1. 2.

BUFO CORNUTUS.

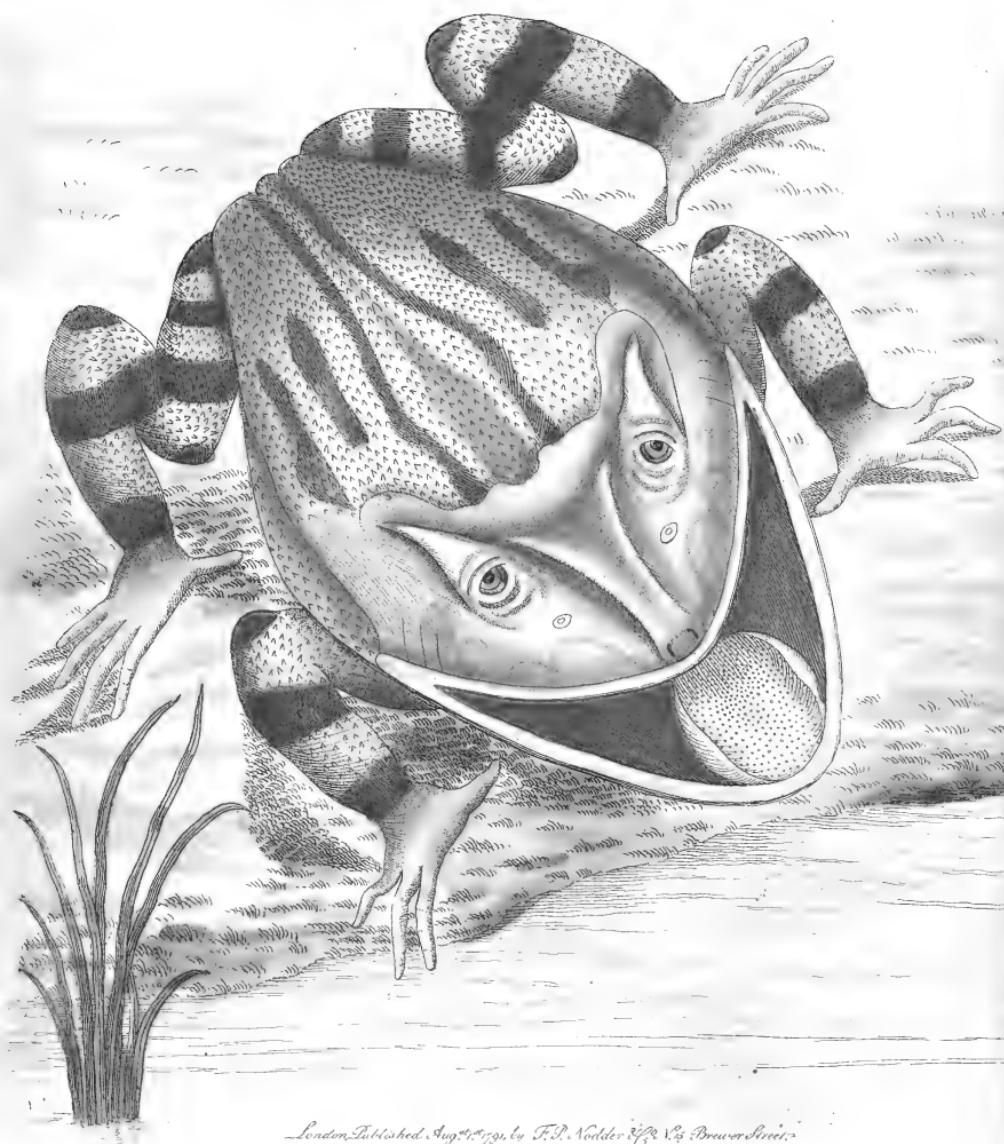
Laur. amph. p. 25. n. 2.

Qui quæstioni respondere vellet, quidnam animal effinxerit natura deformissimum? vix hæreret ranam cornutam quasi exemplum insolitæ turpitudinis feligere; quæ sane vel ipsa Pipa seu Surinamenſi foedior est et monſtrosior. Non poſſumus illam non horrefcere et aversari frontem intuentes quasi cornua gerentem, ſummas nempe palpebras in mucronem calloſum productas, orisque immodicam amplitudinem, hiatumque ultra ſolitum immanem. Rariffima eſt rana cornuta. Americam

Septen-

Septentrionalem inhabitat, et in Virginia potissimum invenitur. Color generalis est fusco-virescens, fasciis latis albicantibus longitudinalibus per dorsum ductis. Cutis quoque corporis superioris tuberculis aculeatis coniecta est. Crura fusco transversim fasciata sunt.





London Published Aug. 4. 1791 by F. J. Nodder 372 & 374 Brewer Street.

THE
HORNED FROG.



GENERIC CHARACTER.

Body four-footed, naked, without tail.

Linn. Syst. Nat.

SPECIFIC CHARACTER.

FROG with horned eyelids.

Should inquiry be made, which is the ugliest animal yet known to exist? the creature here represented might perhaps with justice be proposed as an answer: an animal of such prodigious deformity as even to exceed in this respect the Surinam toad, or *Rana Pipa*. What gives an aspect so peculiarly forbidding to the present species is the horned appearance of the front, which is caused by a sharp-pointed elongation of the upper part of each eyelid into a callous process resembling a horn: to this may be added the excessive width of the mouth, which exceeds that of every other known species of *Rana*. This animal is extremely rare, and is a native of some parts of North America. It is principally found in Virginia. Its general colour is

is a greenish brown, with broad longitudinal stripes of whitish on the back, and the skin on the upper part of the body is covered with a kind of spiny tubercles: the legs are transversely fasciated with brown.

PAPILIO HELENA.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato-capitatæ.

Alæ (sedentis) erectæ sursumque connientes.

(*Volatu* diurno.)

- *Lin. Syst. Nat.* p. 744.
Eq. Tr.

CHARACTER SPECIFICUS, &c.

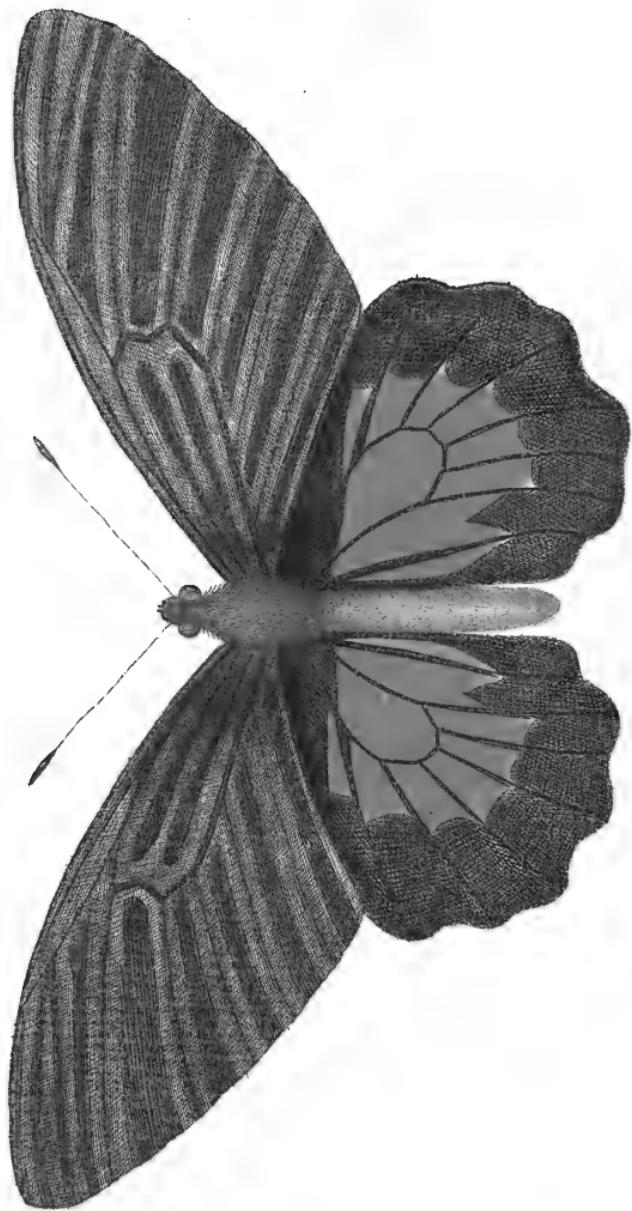
PAPILIO alias dentatis atris concoloribus: posticis disco communi aurato.

Lin. Syst. Nat. p. 748.

Clerk. ic. t. 22. f. 1.

Fabr. Spec. Inf. 2. p. 10.

Papilionem Helenam, vix ab ullis exoticis pulchritudine superatum, distinguit aterrimus et quasi holosericus alarum color; quarum fibræ virgis nonnullis pallidioribus et cinereis notantur. Alis utrisque inferioribus summum decus affert macula amplissima insigniter aureo-flava, venisque nigris pulcherrime striata. Americam australem incolit Papilio Helena, et præcipue in Surinamia invenitur.



London, Published Augt 1870, by H. G. Allen & C. J. B. Bowes, Finsbury.

H E L E N A.
OR, THE
BLACK-AND-GOLD BUTTERFLY.



GENERIC CHARACTER.

The *Antennæ*, or *Horns*, thickening towards the upper part, and generally terminating in a knob, or club-shaped tip.

The *Wings* (when sitting) erect, and meeting upwards. (*Flight diurnal.*)

SPECIFIC CHARACTER.

BLACK BUTTERFLY with both surfaces alike; the disk of the lower wings of a brilliant gold colour.

The *Papilio Helena*, one of the most beautiful of the exotic butterflies, is distinguished by the deep velvet black of its wings, which are marked by a few lighter or greyish stripes accompanying the fibres; while the lower wings are each ornamented by a very large spot or patch of the richest golden-yellow, traversed by several veins of black. It is a South-American insect, and is principally found at Surinam.



MEROPS SUPERBUS.



CHARACTER GENERICUS.

Rostrum curvatum, compressum, carinatum.

Lingua apice laciñiata.

Pedes gressorii.

Lin. Syſt. Nat. p. 182.

CHARACTER SPECIFICUS.

MEROPS RUBER, fronte, gula, uropygioque
cæruleis, rectricibus duabus intermediis lon-
gioribus.

Quanquam Meropi Brasiliensi Lathami affinis admo-
dum sit hæc avis, adeo tamen coloribus discrepat, ut
pro distincta specie jure habeatur. Illam igitur diverso
nomine signavi. In Museo Britannico affervatur pul-
chrum specimen unde delineata est hæc nostra figura.





THE
S U P E R B B E E - E A T E R .



GENERIC CHARACTER.

Bill curved, compressed, carinated, and sharp pointed.

Tongue (generally) laciniated at the tip.

Feet gressorial, *i. e.* three toes forward and one backward; and the three lower joints of the middle toe closely joined to those of the outmost.

SPECIFIC CHARACTER.

RED BEE-EATER, with front, throat, and rump, blue; and the two middle tail-feathers longer than the rest.

The colours of this bird differ so much from those of the *Merops Brasiliensis* of Mr. Latham, to which it is yet extremely nearly allied, as to justify its being regarded as a distinct species. I have therefore called it by a different title. The beautiful specimen from which the present figure was taken is preserved in the British Museum.

MADREpora FUNGITES.



CHARACTER GENERICUS.

Animal *Medusa*.

Corallium cavitatibus lamelloso-stellatis.

Lin. Syst. Nat. p. 1272.

CHARACTER SPECIFICUS, &c.

MADREpora simplex acaulis convexa, subtus plerumque concava, interdum convexa et pedunculata.

FUNGUS LAPIDOSUS.

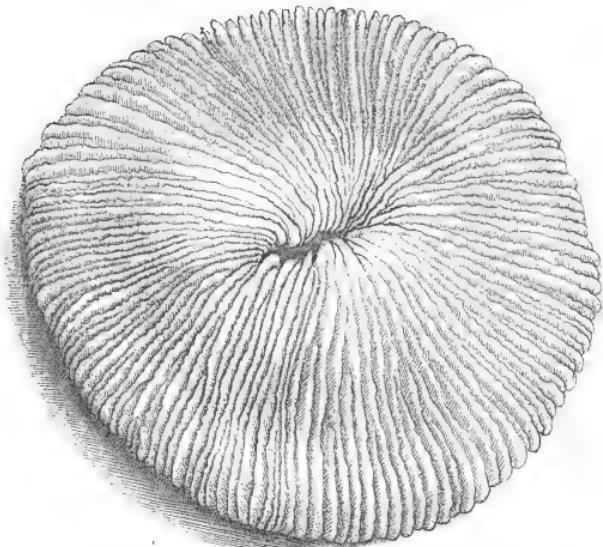
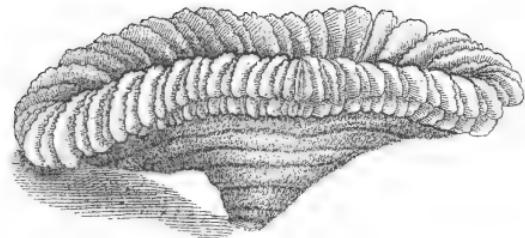
Clus. exot. 125. f. 1.

FUNGUS LAPIDEUS.

Buch. bijt. 3. p. 801. f. 1, 2.

Cum antea^{ctis} temporibus, dormiret recentiorum philosophorum curiosa sedulitas, quæ jam fere per totum orbem feliciter diffunditur; nugis et fabellis anilibus saepius credebatur, vetuitque plurimorum hominum habes incuria ut vel ampla esset speciminum supellex, vel etiam nactorum plena et genuina descriptio. In plantis igitur et animalibus indies erratum est. Radix filicis in septentrionali Asia satis vulgaris naturam cum quadrupede participare diu censebatur, vocabaturque communiter

niter *agnus vegetabilis*. Gryllorum certæ species exoticæ quibus alæ sunt amplæ, virides, et venosæ, folia animata habebantur: nec defuere qui serio et pertinaciter afferuerunt arborum quarundam Indicarum et Americanarum, simul ac deciderant folia, subito alis pedibusque gaudentia circa ipsam arborem volitare. *Coralium* quoque, seu Madreporam in tabula depictam, fungum esse, sive agaricon in lapideum conversum opinabantur tunc temporis physici. Ignoscendum est sane huic errori potius quam aliis multis, cum Madrepora agarico simillima plerosque spectatores (exceptis paucis, quibus res penitus scrutari cordi est) posset decipere. Comerti sunt tandem in India Orientali, ubi frequentior est Madrepora, seduli examinatores, esse eam fulcrum seu habitaculum substantiæ gelatinosæ et animatae, forma ad *Medusas* ut vocantur, orbiculatas et depresso accendentis. Efficit animal mirandum hoc domicilium, materiem calcariam glutinosam ab omni corporis parte copiose exprimendo; ita ut fulci seu depressions in Madrepora, lamellis totidem acutis et radiatis in ipsius animalis corpore respondeant; quod cum sit tenerrimum, aeri expositum in meram pelliculam paucis horis decrescit, nec nisi in aqua marina, qua nascitur, probe potest examinari. In nonnullis speciminiibus ex parte inferiore, seu concava, proles minor varia protruditur. In India præcipue Orientali invenitur Madrepora Fungites, crescitque interdum ad magnitudinem sex unciarum in diametro, interdum vix unam superat. Color albus non caret elegantia, totaque superficies exterior tuberculis minutissimis leviter exasperatur. Lamellarum margines interrupto ordine ferratae sunt.



THE MUSHROOM MADREPORE.



GENERIC CHARACTER.

The *Animal* resembling a Medusa.

The *Coral* marked by lamellated star-shaped cavities.

SPECIFIC CHARACTER.

MADREPORE with rising or convex laminæ above, generally concave and papillose beneath, and sometimes footstalked.

Before that spirit of inquiry which characterizes the modern cultivators of natural history began to diffuse itself in Europe, innumerable errors were committed in the histories both of animals and vegetables, while the general neglect with which the major part of mankind regarded subjects of this nature, still increased the difficulty of obtaining proper specimens and descriptions of several of the most curious and interesting productions of nature. The root of a species of fern, not uncommon in the northern parts of Asia, was supposed to partake of the nature of a quadruped, and was dignified by the title of the vegetable lamb. Some of the locust tribe with large green veiny wings were believed

to

to be animated leaves; and there were not wanting those who were ready to vouch the certainty of the leaves which fell from several trees in India and America becoming suddenly furnished with legs and wings, and soon after fluttering round the branches of the tree which gave them birth; while the coral which forms the subject of the present plate was regarded as a species of petrified mushroom. It must be confessed that of all erroneous ideas this was one of the most plausible; for so very striking is the general resemblance which this coral bears to the genus *Agaricus*, that it is impossible not to be forcibly impressed with the similarity of the structure. From observations, however, which have been made in those parts of India where it is commonly found, it appears to be the production of an animal of a soft or gelatinous nature, and which bears a general affinity to the shape of the orbicular depressed *Medusæ* or *Sea-Blubbers*. The animal forms this curious fulcrum or habitation by secreting a copious deposition of calcarious matter from every part of its body, and the fulci or furrows in the Madrepore answer to so many sharp radiated laminae of the creature's body. So tender is this animal, that it collapses and shrinks to a mere pellicle when exposed for some hours to the air; so that it is only in the sea-water that it can be viewed to advantage. Some specimens of this Madrepore are proliferous, or have young productions of the same form growing from several parts of the concave or lower surface. The *Madrepora Fungites* is found of various sizes, from an inch to six inches in diameter. Its colour is an elegant white, and every part of the

external

external surface is roughened by small protuberances, and the edges of the lamellæ or gills are irregularly serrated. It is principally found on the coasts of the East Indies.

SCARABÆUS GOLIATUS.



CHARACTER GENERICUS.

Antennæ clavatæ capitulo fissili.

Tibiæ anticæ saepius dentatæ.

Lin. Syst. Nat. p. 541.

CHARACTER SPECIFICUS, &c.

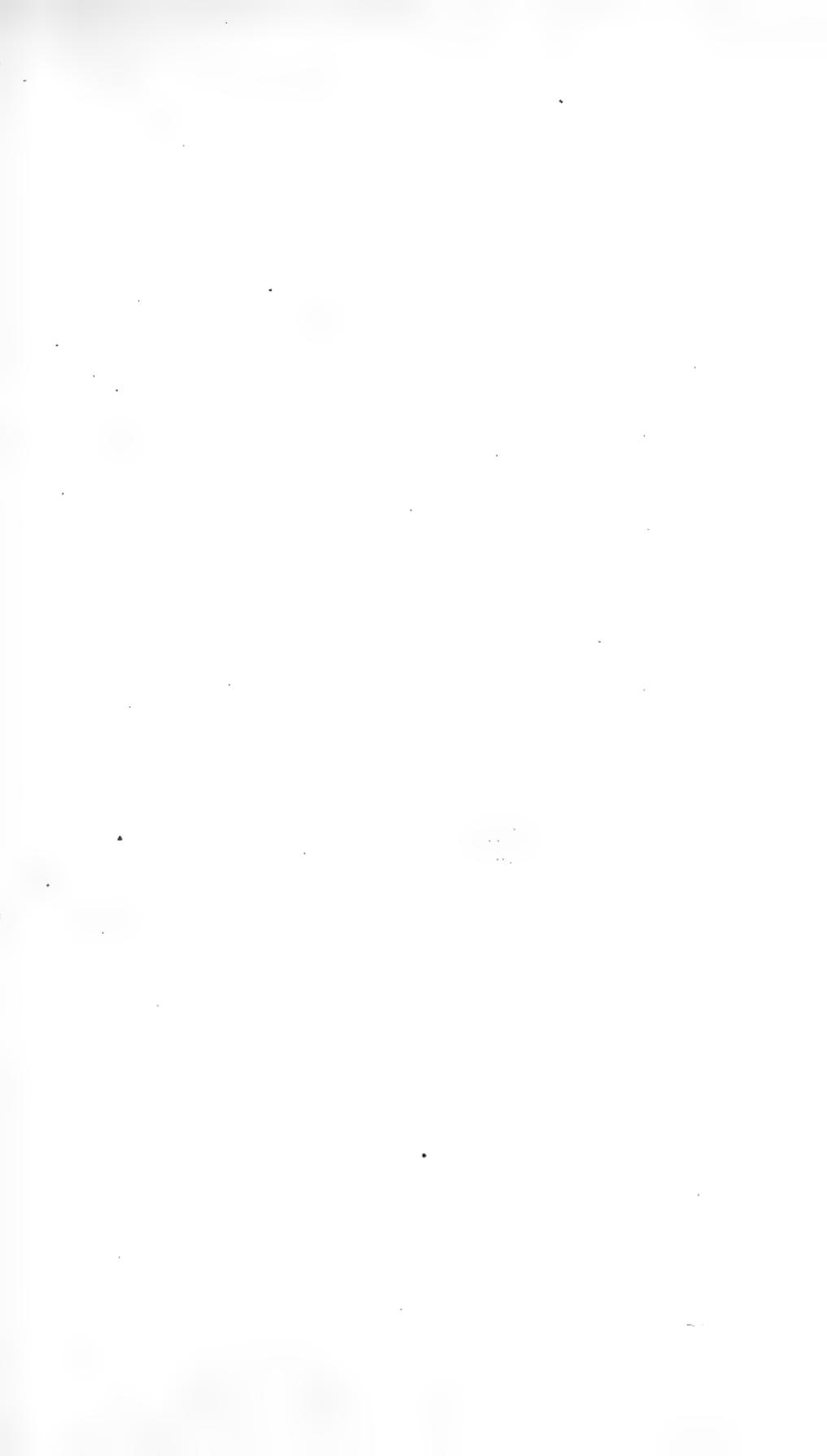
SCARABÆUS scutellatus, thorace inermi, clypeo bifurco.

Fabr. Spec. Ins. tom. 1. p. 14.

Drur. Ins. 1. tab. 31. & 3. tab. 40.

Voet. Scar. tab. 22. fig. 51.

Scarabæus Goliatus, sui generis fere rarissimus, Africam incolit, præcipue Guineam. Coloribus variat; thorace interdum roseo nigris lineis variato, elytris purpureo-ferrugineis; interdum tum thorace tum elytris albido-flavescentibus, nigro interstinctis. In elegantissimo opere Domini Drury primo depicta est hæc scarabæi species.





THE
FORK-HEADED BEETLE.



GENERIC CHARACTER.

Antennæ divided at the tip, or head, into several lamellæ.

Tibiæ, or second joints of the fore-legs, generally toothed.

SPECIFIC CHARACTER.

BEETLE with plain thorax striped with black, and forked head.

The *Scarabæus Goliatus*, one of the rarest of its genus, is a native of Africa, and is principally found in Guinea. It is a species which varies much in colour; some specimens having the thorax rose colour, striped with black, and deep-ferruginous or purple-brown elytra, or wing-cafes, while in other specimens both thorax and elytra are of a dull yellowish white, or cream-colour, striped and varied with black. This curious insect was first figured in the elegant work of Mr. Drury.

TROCHILUS MULTICOLOR.



CHARACTER GENERICUS.

Rostrum subulato-filiforme, apice tubulato, capite longius: *Mandibula* superior vaginans inferiorem.

Lingua filiformis, filis duobus coalitis tubulosa.
Pedes ambulatorii.

Lin. Syft. Nat. p. 189.

CHARACTER SPECIFICUS, &c.

TROCHILUS curvirostris fuscus, vertice, gula, pectore, humerisque, viridi-aureis, abdomine rubro, genis cyaneis.

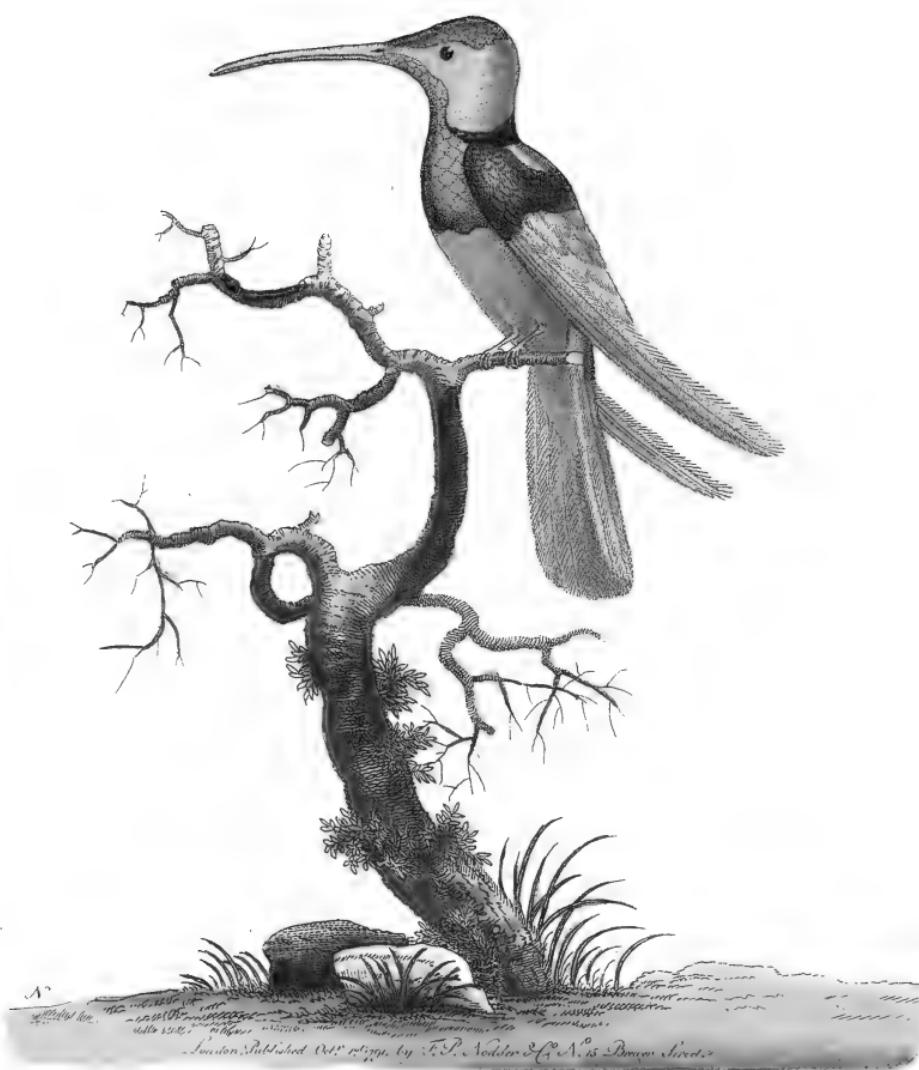
TROCHILUS MULTICOLOR.

Lath. ind. orn. p. 308.

Gmel. Syft. Nat. p. 490.

Trochilus Multicolor, variis ditissimus coloribus, inter rariissimas sui generis species habetur. Depingitur figura nostra a specimine pulcherrimo quod suppeditavit Museum Britannicum. Americam Australem incolit haec avicula.





THE
HARLEQUIN HUMMING-BIRD.



GENERIC CHARACTER.

Bill slender, tubular, the upper mandible sheathing the lower.

Tongue very long, missile; formed of two conjoined cylindric tubes.

Toes three forward, one backward.

SPECIFIC CHARACTER, &c.

Curve billed brown Humming-Bird, with gold-green crown, throat, breast, and shoulders, red belly, and blue cheeks.

HARLEQUIN HUMMING-BIRD.

Lath. Synops. 2. p. 760.

The *Trochilus Multicolor*, or Harlequin Humming-Bird, so remarkable for the diversity of its colours, is one of the rarest of its genus. The figure here represented is taken from the beautiful specimen in the British Museum. This bird is a native of South America.

ISIS NOBILIS.



CHARACTER GENERICUS.

Stirps lapidea, rigida.

Flores Hydræ e poris lateralibus.

CHARACTER SPECIFICUS, &c.

ISIS stirpe corallina æquali continua, striis obfo-
letis obliquis, ramis vagis.

Lin. Syst. Nat. p. 1288.

CORALLIUM RUBRUM.

Baub. pin. 366.

GORGONIA PRETIOSA.

Ellif. Zooph. p. 90.

Isis nobilis, seu Corallium vulgare rubrum, e sub-
stantiis illis marinis est quæ, communi fere physicorum
recentium consensu, ab animalibus hydras seu polypos
quodammodo referentibus effungi creduntur. Degunt
hæc animalia in cavitatibus istis quæ in cortice corallii
molli et subereo frequenter conspicuntur; eorumque
vestigia paulatim distantia punctisque similia in super-
ficie etiam durissima imprimuntur, omnibus corallii
ipsius ramusculis striis longitudinalibus ab ipsa bafi ex-
trinsecus notatis. Faterendum sane est non mediocri fide
opus esse ut omnia Lithophyta ab animalibus incolenti-
bus

bus revera et omnino formari persuasum habeamus. Cum vero nostrum non sit notissimas Domini Ellifi observationes in dubium vocare, gaudeant volumus lectores suis sententiis, statuantque ipsi an inter animalia an vegetabilia substantias hasce satius sit numerare: ad utraque enim miro modo videntur pertinere. Notandum est specimina corallii rubri, quo formosiora videantur, cortice exteriore, ut plurimum, denudari. Depingitur igitur ramulus cortice obductus juxta ipsam naturam. *Fig. 2.*



S

London. Published Octr 1791 by F. P. Nodder Esq. No. 18 Brewer Street.

RED CORAL,



GENERIC CHARACTER.

The *Coral* having the habit or appearance of a plant.

The *Stem*, or internal part, differing in the different species, and generally either of a horny or a stony appearance.

The *cortical part* soft, and inhabited by animals resembling polypes.

SPECIFIC CHARACTER, &c.

BRIGHT-RED STONY-BRANCHED CORAL, with longitudinal striæ.

COMMON RED CORAL.

The *Iris nobilis*, or common red Coral, is one of those numerous submarine productions which, by the almost general consent of modern naturalists, are regarded as the fabrication of animals resembling polypes, which reside in the cavities so constantly seen in the soft or cortical part of the coral; and the impressions or vestiges of which are visible even on the surface of the hard part or the coral itself; being generally seated at distant intervals, and appearing like small impressed spots, while the

the whole coral, throughout all its ramifications, is marked externally by longitudinal striæ proceeding from the very base itself. It must be candidly confessed that a good share of philosophical faith is necessary to reconcile us to the idea of all the coral tribe being entirely the work of animals: yet as we cannot presume to controvert the well-known observations of Mr. Ellis, we shall leave our readers to their own opinions, and at perfect liberty to regard these curious substances either as belonging to the animal or vegetable kingdom, to both of which they seem to be strangely allied. It is necessary to observe that the specimens of red coral as generally seen, have, in order to increase the beauty of their appearance, been deprived of their cortical or exterior coat. A branch in its natural state, or with its exterior coat, is represented at *fig. 2.* in the annexed plate.

LACERTA VARIA.



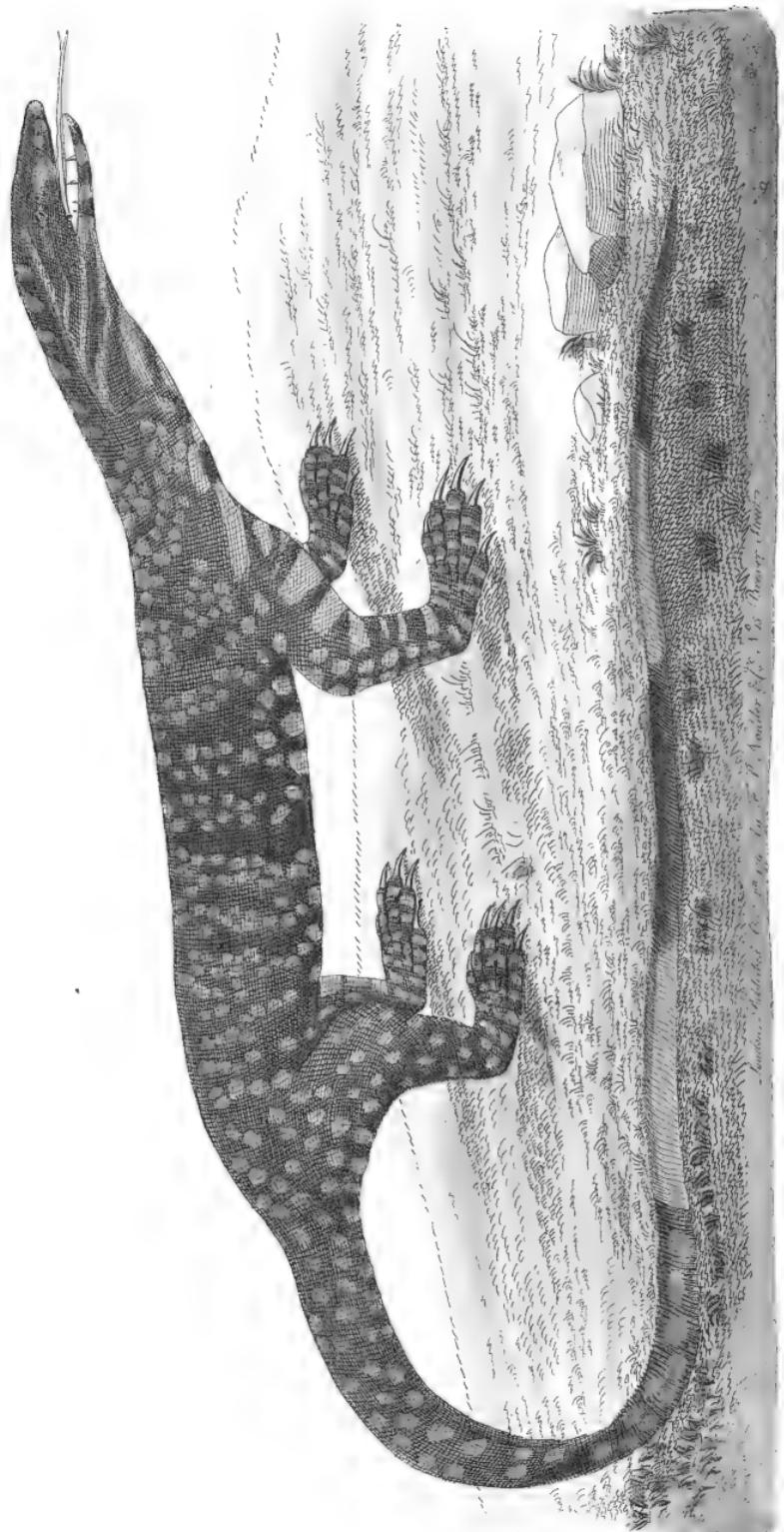
CHARACTER GENERICUS.

Corpus tetrapodium, caudatum, nudum.

CHARACTER SPECIFICUS,

LACERTA cauda longa carinata, corpore maculatis transversis variis.

Tam prope accedit hæc lacerta ad illius similitudinem quam Linnæus nomine *Monitoris* descripsit, ut dubium forsan sit an species vere sit distincta, seu illius tantum varietas. Corpus uncias circiter quindecim longum est, caudaque multo longior. Color niger est, notis, striisque flavis, imparibus, per corpus transverse discurrentibus. Super crura sunt series transversæ macularum rotundarum, caudaque fasciis latis nigris flavisque alternatim interstinguitur. In nonnullis speciminiibus color flavus pallidior multo est quam in aliis, et fere albescens. Plurima hujus lacertæ specimina novissimis a Nova Hollandia navigiis in Angliam illata sunt.



THE
VARIEGATED LIZARD.



GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER.

LIZARD with long carinated tail, the body transversely variegated.

This Lizard approaches so extremely near to the *Lacerta Monitor* of Linnæus, or *Monitory Lizard*, as to make it doubtful whether it be not in reality a variety of that species. The body is about fifteen inches in length, and the tail is considerably longer. The animal is of a black colour, variegated with yellow marks and streaks of different shapes, and running in a transverse direction. On the legs are rows of transverse round spots; and on the tail broad alternate bars of black and yellow. In some specimens the yellow is much paler than in others, and nearly white. Several specimens of this species were brought from New Holland during the late voyage from Botany Bay.



TETRAO PORPHYRIO.



CHARACTER GENERICUS.

Macula prope oculos nuda, papillosa.

Lin. Syst. Nat. p. 273.

CHARACTER SPECIFICUS, &c.

TETRAO VIOLACEO-NIGRICANS, viridi suffusus, alis fusco-ferrugineis, crista compresso-erecta ferrugineo-rubente.

LE ROULOU DE MALACCA.

Son. Voy. Ind. vol. 2. p. 174. pl. 100.

Genus *Tetrao* numerosum varias species complectitur quæ nominibus perdicum, urogallorum, coturnicum, &c. communiter vocantur; pertinetque ad divisionem gallinaceam, quæ scilicet continet omnes illas aves quæ forma vivendique modo ad gallum gallinaceum plus minus accedunt. Tetraonum plures exotici sunt; maxima pars extra Europam nutritur. Species de qua jam loquimur, ut fileamus inusitatum colorem, generis sui est rarissima. Notandum præterea est characteres illi esse incertos; ut ad genus Columbæ non minus quam *Tetraonis* pertinere videatur; præsertim si specimen exsiccatum inspicias. Figura hæc nostra ab ipsa ave viva fideliter depicta est. Palpebris peculiare quoddam est;

F

margo

margo némpe crenis parvulis ruberrimis et extantibus ornatus. Crista quoque mollissima et quasi ferica. Peninsulam Malaccam, variasque Indiæ Orientalis insulas inhabitat Tetrao Porphyrio. Observandum est in aliquibus speciminibus, (maribus fortasse,) extare in basi frontis fetas aliquot nigras, quæ in hoc specimine defuere. Notandum quoque est hanc avem, quamvis in genere adeo diverso, in multis similem esse Cuculo Persæ Linnæj.



THE
VIOLACEOUS PARTRIDGE.



GENERIC CHARACTER.

Eyes (generally) bounded, either above or on one side, by a granulated red skin.

Bill convex, short, and strong.

SPECIFIC CHARACTER, &c.

VIOLACEOUS - BLACKISH PARTRIDGE
with a cast of green, ferruginous-brown
wings, and compressed, upright, ferrugi-
nous-red crest.

LESSER-CROWNED PIGEON.

Lath. Syn. vol. 2. p. 622.

The numerous genus *Tetrao*, comprehending all the species of Grouse, Partridge, Heathcock, &c. belongs to the order called *Gallinæ*, or such as in their general characters and appearance make some approach to the common Cock, or *Phasianus Gallus* of Linnæus. By far the major part of the Tetraones are exotic birds; and indeed most of them are extra-European birds. The present species, exclusive of its unusual colour and peculiar elegance, is likewise remarkable for being one of the rarest of the genus: it is also to be observed,

F 2

that

that from a kind of ambiguity in its appearance, it may seem to bear almost as much affinity to the genus *Columba* as to that of *Tetrao*; and indeed in a dried specimen it is not easy to decide with absolute precision to which genus it should with the greatest propriety be referred. The present figure was taken from the living bird, and exhibits with great fidelity its several characters. The eyelids are singularly formed; being regularly surrounded by a series of rising crenatures of the most vivid scarlet. The crest also, which is of a structure peculiarly delicate, adds greatly to the beauty of the bird. It is a native of Malacca, and some of the East-Indian islands. It should be observed that in some specimens, (perhaps males,) a certain number of long, black, rising bristles appear, seated at the base of the front: these in the present specimen were wanting. It may be added, that notwithstanding the difference of its genus, this bird bears a striking affinity with the *Cuculus Persa* of Linnæus.

PHALANGIUM CANCROIDES.



CHARACTER GENERICUS.

Pedes octo.

Oculi verticis duo contigui, duo laterales.

Frons antennis pediformibus.

Abdomen rotundatum.

Lin. Syst. Nat. p. 1028.

CHARACTER SPECIFICUS, &c.

PHALANGIUM abdomine obovato depresso, chelis laevibus : digitis pilosis.

Lin. Syst. Nat. p. 1028.

CHELIFER abdomine lineis transversis.

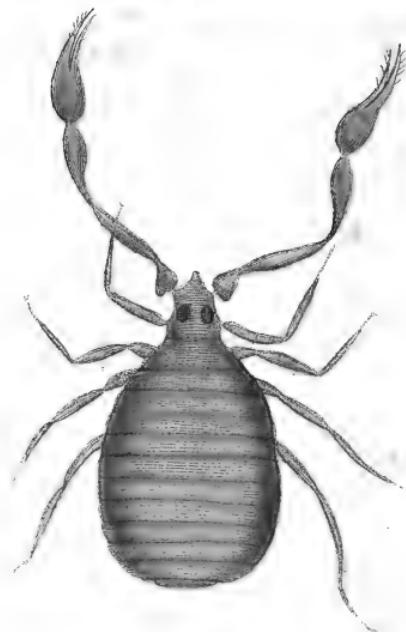
Geoffr. Paris. 2. p. 618.

SCORPIO MINIMUS.

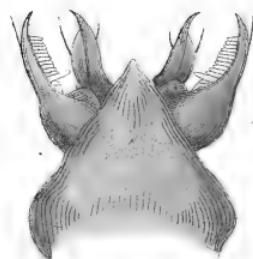
RoeSEL. 3. Supl. t. 64.

Animalculum hoc, physicis diu cognitum, diversis temporibus ad diversa genera retulerunt entomologi. Laboriosus celeberrimusque Swammerdamus quasi scorponis speciem descripsit. Idem fecit RoeSELius. Quanquam in editione duodecima Systematis Naturæ LINNÆUS in genere Phalangii posuerit, in Fauna tamen Suecica ab eodem auctore conscripta, inter acaros numeratur. Ingeniosus Degeer genus illi distinctum nomine Cheliferi

Cheliferi instituit. Fabricius denique in Systemate Entomologico iterum ad genus *Scorpii* amandavit, cui fortasse conjunctius est quam ulli alii. Magnitudine multum variat hoc insectum: quæ enim in Anglia inveniuntur specimina, multo minora sunt quam in Sebæ, Swammerdami, et Roeselii operibus depicta. Figura microscopica in hac nostra tabula accuratissime delineatur. Altera quæ disjungitur, caput et thoracem amplitudine admodum aucta ostendunt, ut partes pectinatae apparet; quæ quamvis situ diversæ, formam tamen fere eandem habent ac in scorpis. Figura 1. magnitudinem naturalem insecti, ut in Anglia conspicitur, monstrat. Accusat hoc insectum Linnæus, sed (ut mihi videtur,) injuria, cutim interdum penetrandi, papulamque magnitudine pisi, summo cum dolore excitandi. Circa parietes antiquos, ut plurimum invenitur, et interdum inter papyram, &c. conspicitur. Inter infecta quoque rariora non immerito numeratur.



I. *



I.

London, Published Nov. 1st 1792, by P. P. Nodder & Co. No. 5, Brewer Street.

THE
CANCROID PHALANGIUM,



GENERIC CHARACTER.

Eight Legs.

Two vertical and two lateral Eyes.

Antennæ resembling legs.

Abdomen rounded.

SPECIFIC CHARACTER.

PHALANGIUM with obovate depressed abdomen, and smooth chelæ, slightly hairy at the tips.

This little insect, which has long been known to naturalists, has been occasionally referred to very different genera. The celebrated and laborious Swammerdam has described it as a species of Scorpion. In the works of Roesel it is also regarded as a Scorpion. In the twelfth edition of the *Systema Naturæ* of Linnæus it is ranked under the genus Phalangium; while in the *Fauna Suecica* of the same author it is made an Acarus. The ingenious Degeer institutes for it a separate genus under the name of *Chelifer*. Lastly Fabricius in his *Systema Entomologiæ* has remanded it to the genus *Scorpio*, to which perhaps it is more nearly allied than to any other. This insect seems to vary considerably in size; those which

which are found in our own country being much smaller than the representations given by Swammerdam, Roesel, and Seba. The microscopical figure in the annexed plate is executed with the greatest accuracy. The separate figure represents the head and thorax very much magnified, in order to shew the pectinated parts, which though differing in situation, are nearly of the same form as in scorpions. Fig. 1. shews the natural size of the English specimens. Linnæus accuses it (I believe most unjustly,) of sometimes getting under the skin, and raising a painful tumour. It is generally found on old walls, and sometimes amongst papers, &c., and is not a very common insect.

AMPHISBÆNA ROSEA.

Var. A. Albæ.



CHARACTER GENERICUS.

Annuli trunci caudæque.

Lin. Syft. Nat. p. 392.

CHARACTER SPECIFICUS.

AMPHISBÆNA annulis trunci circiter 223;
caudæ 16.

Generis Amphisbænæ perpaucæ quæ noscuntur species a plerisque serpentibus tantum differunt, ut eas primo visu vermes potius quam angues putemus: squamis enim penitus carent, quarum in loco corpus cingunt annuli seu spatia circularia æque distantia, quæ striis innumeris in longitudinem ductis decussantur. Caput in areas paucas dividitur, squamis majoribus in pleroque colubrino genere non absimiles; caudaque non sensim attenuata, sed vix a proportione cæteri corporis recedens, apiceque valde obtuso seu rotundato. Orta est ab hac forma vulgaris opinio, Amphisbænæ duo esse capita, unum scilicet in utraque extremitate: cum enim oculi adeo minuti sint ut primo visu non distinguantur, eo fit ut inter caput et oppositum extremum ambiguum sit discriminem. Hujus generis species maxima est Amphisbæna alba; ob colorem pallidulum, gil-

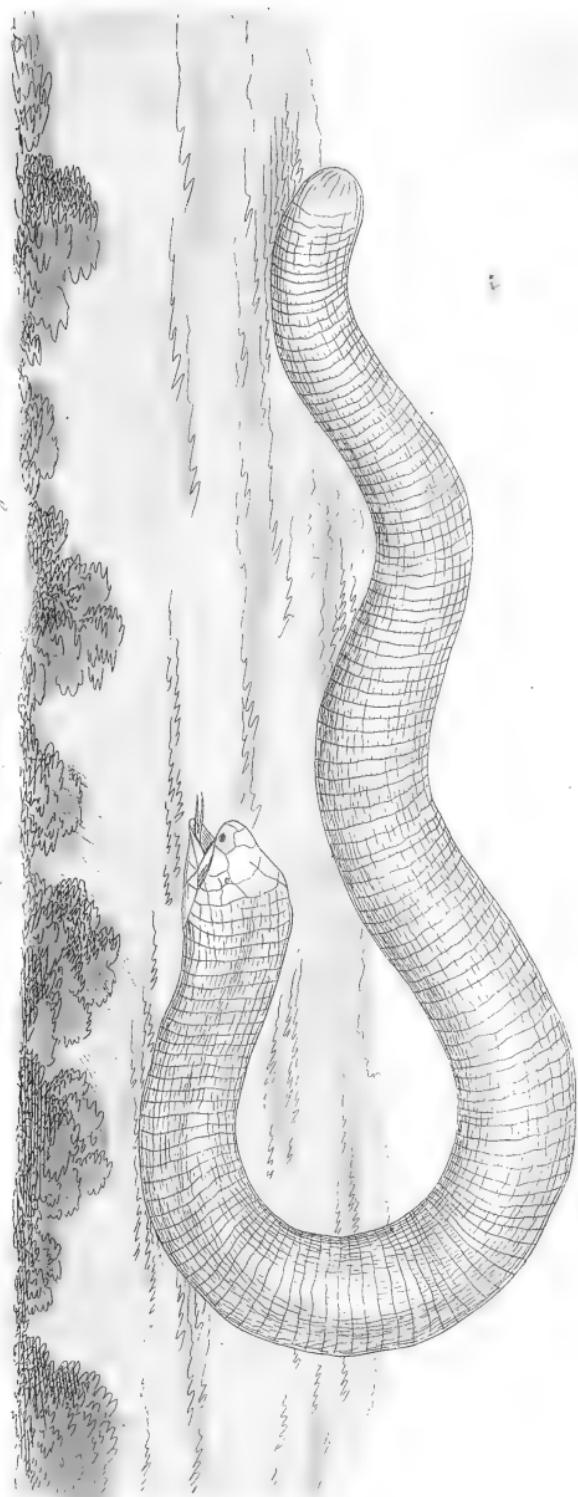
G

vum

vum scilicet, seu fere album, sic nominatā. Colore
tamen est interdum pulcherrime roseo, qualis in tabula
depingitur. Non raro pedali est longitudine. Ameri-
cam incolit et plane innocuus est serpens.



London, exhibited November 10, 1866. P. G. Baudouin, F. R. S.



THE
ROSE-COLOURED AMPHISBÆNA.



GENERIC CHARACTER.

The whole animal marked by annuli or circular segments.

SPECIFIC CHARACTER.

AMPHISBÆNA with the annuli of the body amounting to about 223 ; of the tail 16.

The animals of the genus *Amphisbæna*, which contains but very few species, differ so much from the major part of the serpent tribe, as to be almost liable, on a cursory view, to be mistaken for worms rather than snakes ; being totally destitute of scales ; instead of which the whole animal is marked with equidistant annuli, or circular spaces surrounding the body, and decussated by an infinite number of longitudinal divisions or striæ. The head is marked with a few large divisions or spaces analogous to the large scales in the major part of the genus *Coluber* ; and the tail, instead of tapering gradually, is scarce distinguishable from the proportion of the rest of the body ; and is extremely obtuse or rounded. This peculiarity of shape in the genus *Amphisbæna*, gave rise to the erroneous idea of the *Amphisbæna* being furnished with a head at each extremity :

mity: for as the eyes are very small, and at first view inconspicuous, the head bears no striking mark of distinction from the opposite extremity. The largest species of this genus, is the *Amphisbæna alba*; so called from its colour; which is a very pale cream-colour, or nearly white: it sometimes however occurs of a beautiful rose-colour, in which state it is represented on the annexed plate. The *Amphisbæna alba* is frequently seen of at least a foot in length. It is a native of America, and is perfectly harmless.

XIPHIAS PLATYPTERUS.



CHARACTER GENERICUS.

Caput maxilla superiore terminatum rostro ensiformi.

Corpus alepidotum.

CHARACTER SPECIFICUS, &c.

XIPHIAS pinna dorfi latissima, appendicibus pectoralibus acuminatis longissimis.

GUEBUCU.

Marcgr. bras. l. 4. c. 15. p. 171.

Monstrum fortasse nullum hoc insignius generat oceanus vel Indicus vel Pacificus. Si rostrum spectemus peracutum et velut ensiforme, Xiphiae communis physicis optime cognito affine putemus: cum tamen ab illo variis notis discrepet, speciem omnino diversam habemus necesse est. Longitudo illi est viginti pedum; interdum multo major. Piscem hunc primus descripsit Marcgravius in historia sua Brasiliensi, qui etiam figuram addidit, certe non elegantem, quae tamen ipsum animal satis accurate exprimit. Color generalis est sub-cæruleo-argenteus, dorso superiori, capite, cauda-que exceptis, quæ insigniter fusca sunt. Pinna dorfi magna fusco-pallescit, maculis rotundatis plurimis ni-

H

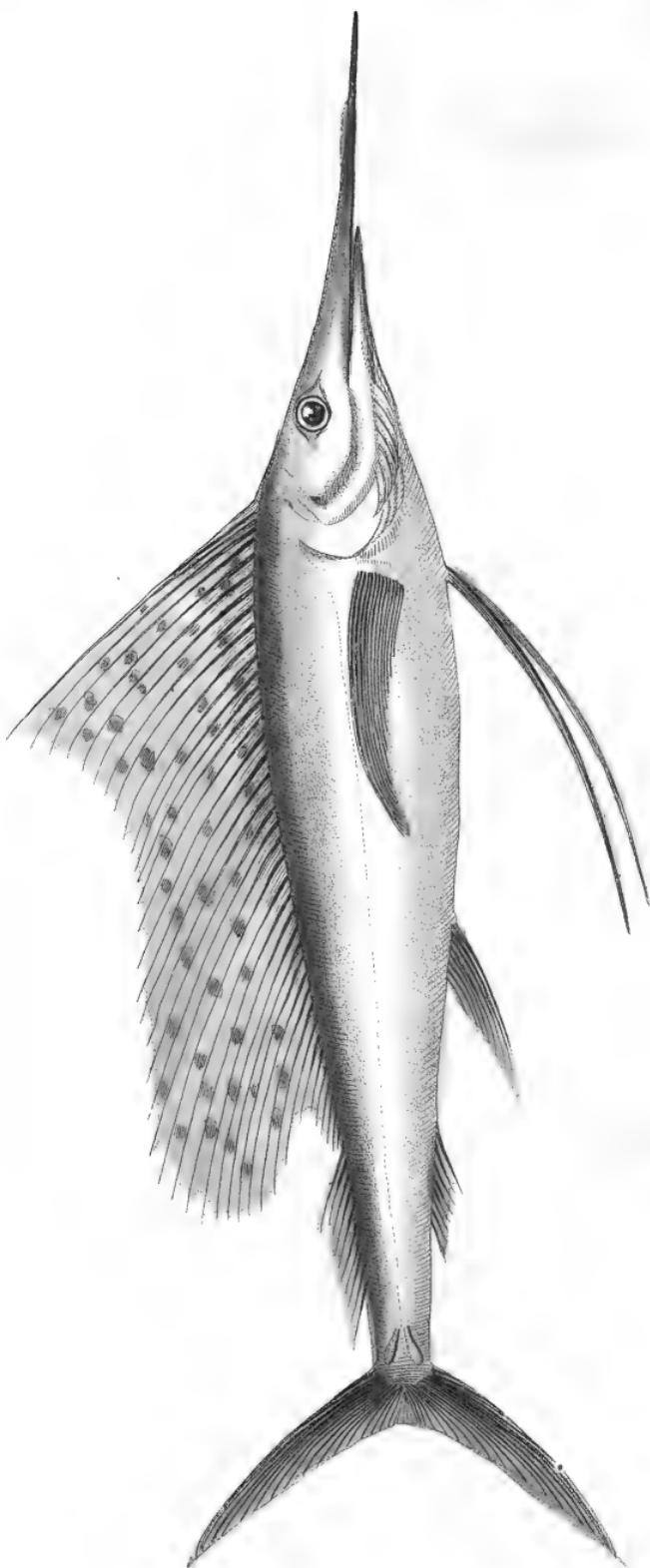
gerimis

gerrimis notata. Specimen ipsissimum, quo forsitan nullum pulchrius et perfectius, unde figura haec nostra delineata est, in Museo Britannico afferatur, cui dono dedit illustris ille physicus JOSEPHUS BANKS, Baronetus; ad quem tribus circiter abhinc annis, venerunt literae a Praefecto navis Indicæ, robur fere incredibile piscis describentes, afferentesque illum densam et solidam navis carinam rostro penitus transfixisse. Mortem ipsi Xiphiæ consivit ictus violentia. Fauste admodum evenit non potuisse piscem rostrum reducere; quod si fecisset, perdita esset navis immissa aqua. Rostrum ipsum ligno infixum in Museo Britannico conspici potest. Non solum maria Indica et Australia, sed etiam Septentrionalia incolit Xiphias Platypterus. Fertur eum balænis esse inimicissimum, cumque iis saepius acerrime pugnare. Notatu dignum est loqui Plinium de navibus Xiphia perfossis; quod tamen inter fabulas veterum physicorum semper habitum est. Cum vero ita se rem revera habere intra puncos annos variis exemplis certissime compertum sit, probabile est Plinium, insciunt licet, de hac ipsa specie locutum esse, quæ tunc temporis a Xiphia communi minus accurate distincta est.

The Waterford Chronicle

SATURDAY, NOV 11, 1893

THIS DAY'S TELEGRAMS



London, Published December 1849 by A. & A. Noddle, 29, New Broad Street.

THE
BROAD-FINNED SWORD-FISH.



GENERIC CHARACTER.

Head furnished with a sword-shaped snout or upper jaw.

Body without apparent scales.

SPECIFIC CHARACTER.

SWORD-FISH with extremely broad back-fin, and very long sharp-pointed thoracic appendages.

Amongst the monsters of the deep which inhabit the Indian and Pacific oceans, the fish here represented is one of the most remarkable. From the appearance of the long and sharp-pointed process of the head, it appears, on a cursory view, very nearly allied to the Sword-fish, already so well known to naturalists. It differs, however, in several particulars, from the common or European Sword-fish, and can by no means be regarded as the same species. This extraordinary fish is found of the length of twenty feet, or sometimes much longer. It was first described by Marcgrave, in his History of Brasil, who has illustrated his description by a figure, which, though not possessing any degree of elegance, is yet sufficient

to ascertain the animal. The general colour of this fish is a silvery blueish white, except on the upper part of the back, the head, and the tail, which are of a deep brown. The back-fin is of a pale brown, finely spotted with roundish marks of deep black. The skin is smooth, and without any appearance of scales. The specimen from which the present figure was taken, is an uncommonly fine one: perhaps the most complete and perfect ever seen in Europe. It is now in the British Museum, to which collection it was presented by Sir JOSEPH BANKS, Bart. President of the Royal Society. About three years ago a letter was sent to the President, from the captain of an East-Indiaman, accompanied by an account of an astonishing instance of the powerful strength which this fish occasionally exerts: the bottom of the said ship having been pierced through by a fish of this species, in such a manner that the sword or snout was completely imbedded or driven through, its whole length, and the fish killed by the violence of the effort. A most singularly fortunate circumstance for the preservation of the vessel! which, had the fish been enabled to have withdrawn its snout, must inevitably have foundered in consequence of the leak. The wood, together with the sword imbedded in it, is now in the British Museum. This fish is found not only in the Brasilian and East-Indian seas, but also in the Northern ocean: It is said to be a great enemy to whales, with which it is reported to have frequent combats! It is remarkable that Pliny mentions the circumstance of the Sword-fish being able to transfix vessels; which has generally been regarded as one of those exaggerations

so frequent in the works of the ancient naturalists ; but as the present fish is well known to possess this power, (several other equally-well authenticated accounts having been received within these few years,) it is surely no improbable supposition, that Pliny, though not conscious of the difference, in reality spoke of this very species, which at that time was doubtless confounded with the common Sword-fish.



LACERTA UNISTRIATA.



CHARACTER GENERICUS.

Corpus tetrapodium, caudatum, nudum.

CHARACTER SPECIFICUS, &c.

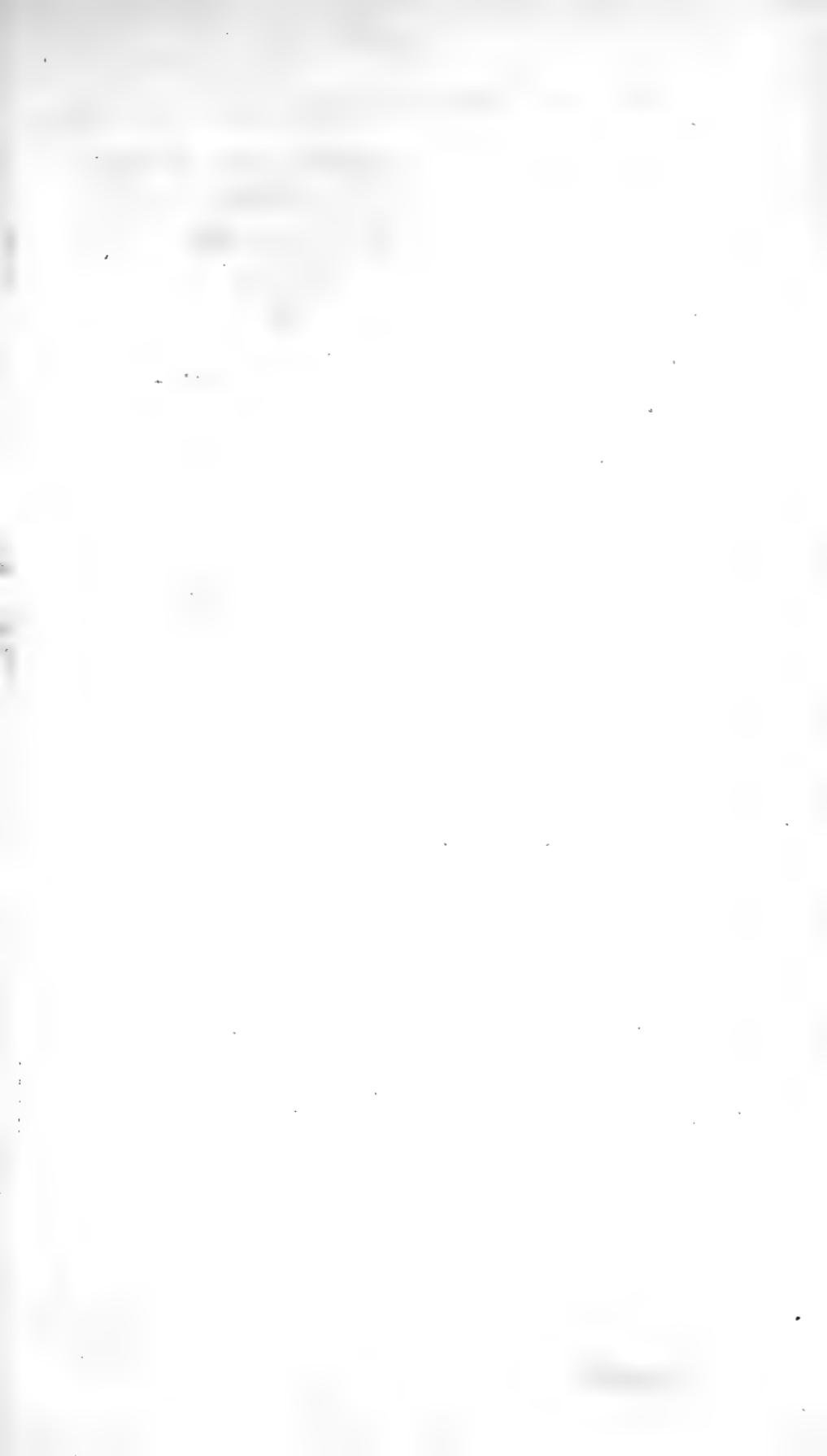
LACERTA FUSCA, subtus pallidior, linea dorsuali albida, super caput furcata, digitis unguiculatis, subtus, lamellatis.

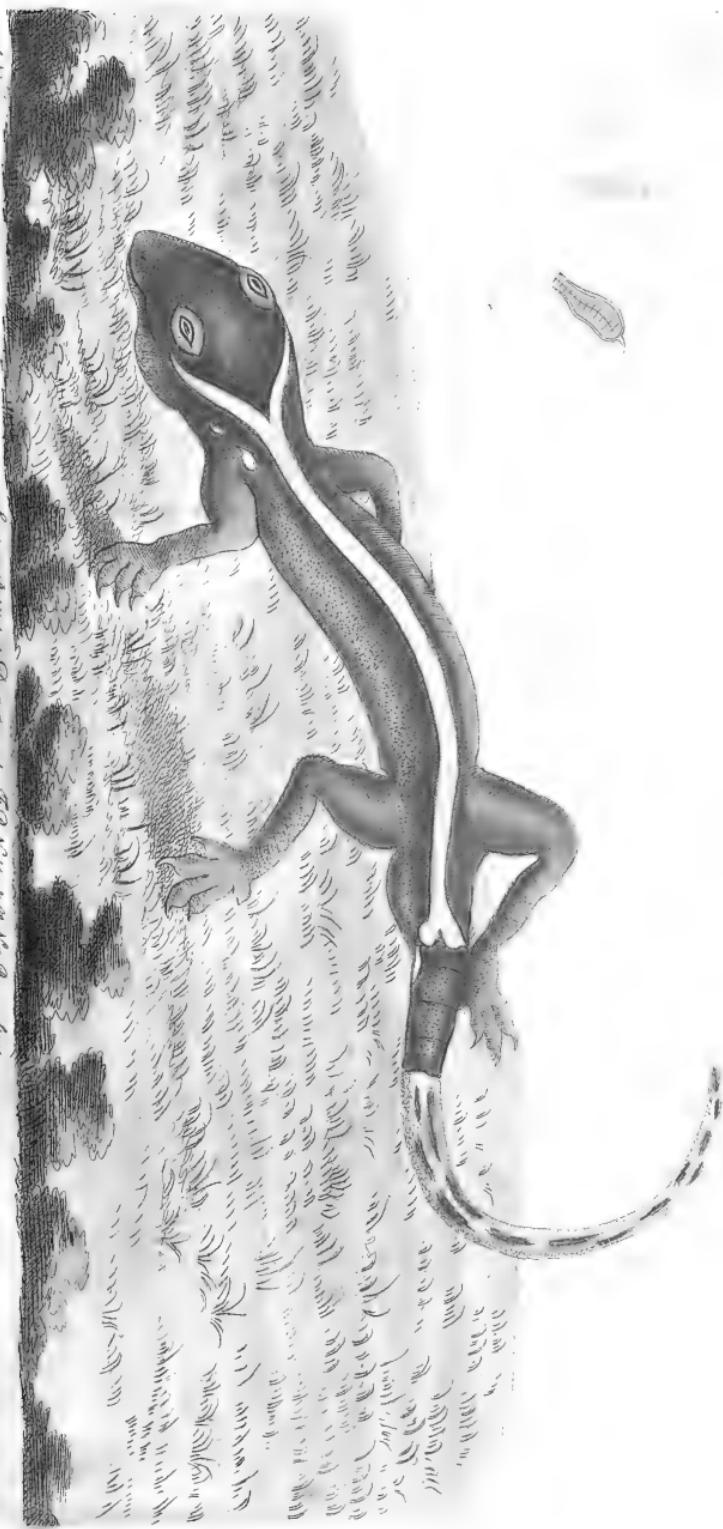
LACERTA VITTATA?

Gmel. Syft. Nat. 1. p. 1067.

Rarissima est hæc lacerta, nec certum est annon adhuc unquam descripta fit. Inter species Linnæanas frustra requiritur, nec non in numeroso horum animalium agmine quæ suppeditat Thesaurus Sebæ. Quantum colligere possum a speciminibus quæ egomet inspexi, longa est, ut plurimum, sex uncias, interdum ad novem pertingens. Color est languide fusco-flavescens, ochræ similis, subtus pallidior. Cauda gilva notis longitudinalibus fuscis variatur. Per dorfi longitudinem late discurrit linea insignis albo-gilva, quæ ab utroque latere capitis furcæ instar, divaricat; extremitatibus oculis tenuis protensis. Cutis tuberculis, præfertim versus caudam, levitur exasperatur, quæ minutissima cum sint, non nisi attento oculo conspici queant. Simillima est

est illi hæc species quam Linnæus nomine *Gecko* diffinxit. In figura nostra exhibetur animal magnitudine ipsius speciminis; sed in figura 1. augetur paululum pars inferior pedis, ut transversæ lamellæ clarus distinctiusque inspiciantur.





London, Published January 1850, by F. D. Nodder & Co., No. 20, Newgate-street.

THE
SINGLE-STRIPED LIZARD.

GENERIC CHARACTER.

Body four-footed, tailed, naked.

SPECIFIC CHARACTER.

BROWN LIZARD, paler beneath, with a white dorsal line forked over the head, and ungualated feet, lamellated beneath.

This species of *Lacerta* is extremely rare, and it may be doubted whether it has yet been described. It certainly is not a Linnæan species, nor does it occur in the numerous collection of Seba. The size of the specimens which I. have examined is rather small, viz. from about six to nine inches in length. The colour is a soft yellowish brown, paler beneath: the tail is cream-coloured, varied with longitudinal marks of brown, and on the back of the animal is a very remarkable white, or rather cream-coloured broad line, which divides on each side the top of the head in the manner of a fork, the extremities of each division just reaching to the eyes. The skin of this Lizard, when closely examined, is slightly exasperated, especially towards the tail, with minute tubercles, but they are so extremely small that they are not perceptible without a close examination. The feet are transversely lamellated beneath.

The

The species to which this animal seems to bear the greatest affinity is the *Lacerta Gecko* of Linnæus. The figure here given represents it of its natural size; and at fig. 1. is represented the under part of one of the feet, rather larger than nature, in order to shew with greater distinctness the transverse lamellæ with which it is furnished.

PSITTACUS CONCINNUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili,
cera instructa.

Nares in rostri basi.

Lingua carnofa, obtusa, integra.

Pedes scandorii.

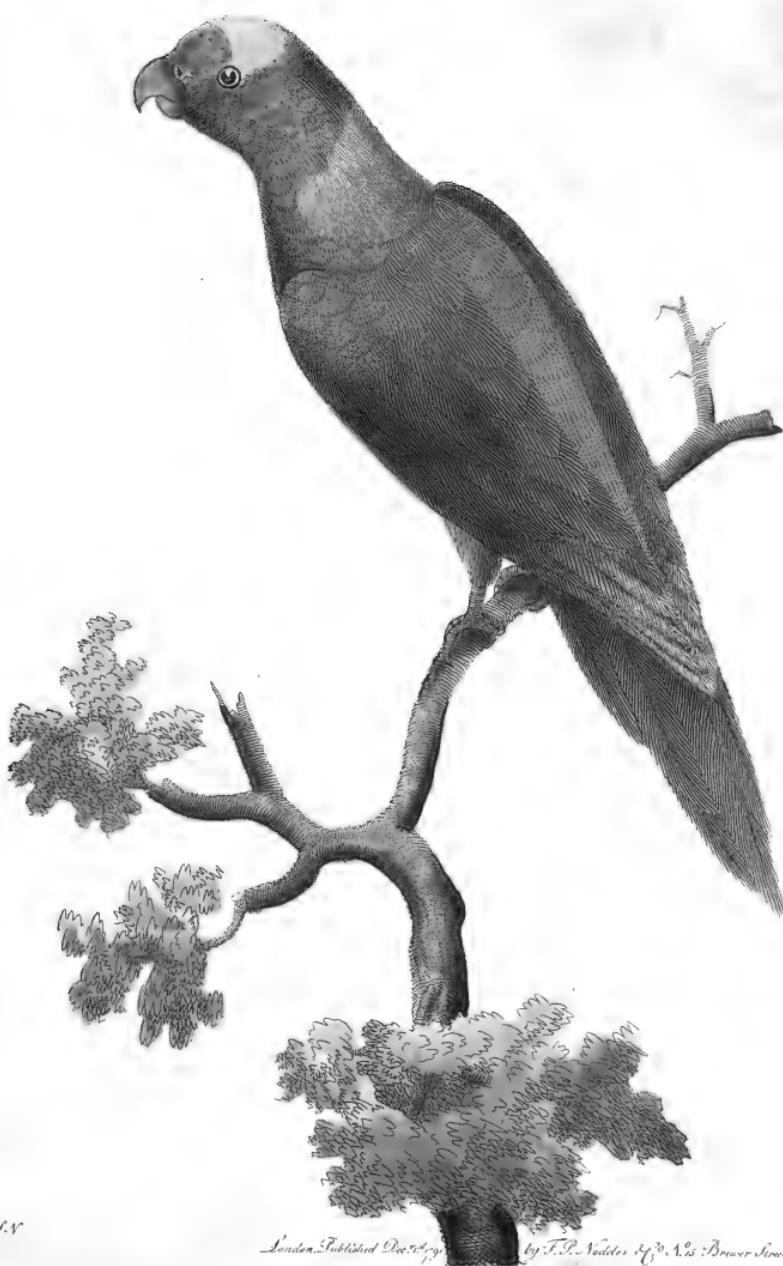
Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS submacrourus viridis, fronte maculaque postoculari coccineis, vertice cæruleo-scente.

Valde affinis P. pacifico. Lath. Syn. 1. p. 252.

Novæ Hollandiæ est incola per pulchra hæc Psittaci species, et inter alias plurimas aves physicis Europæis nuperrime innotuit. Magnitudo est quasi parvi Turrituris.



J. N.

London. Published Dec. 7, 1790.
by F. P. Nodder, M. D. 1. 15, Brewer Street.

THE
CRIMSON-FRONTED PARRAKEET



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.

Nostrils round, placed in the base of the bill.

Tongue fleshy, broad, blunt at the end.

Legs short. Toes formed for climbing, viz. two backward and two forward.

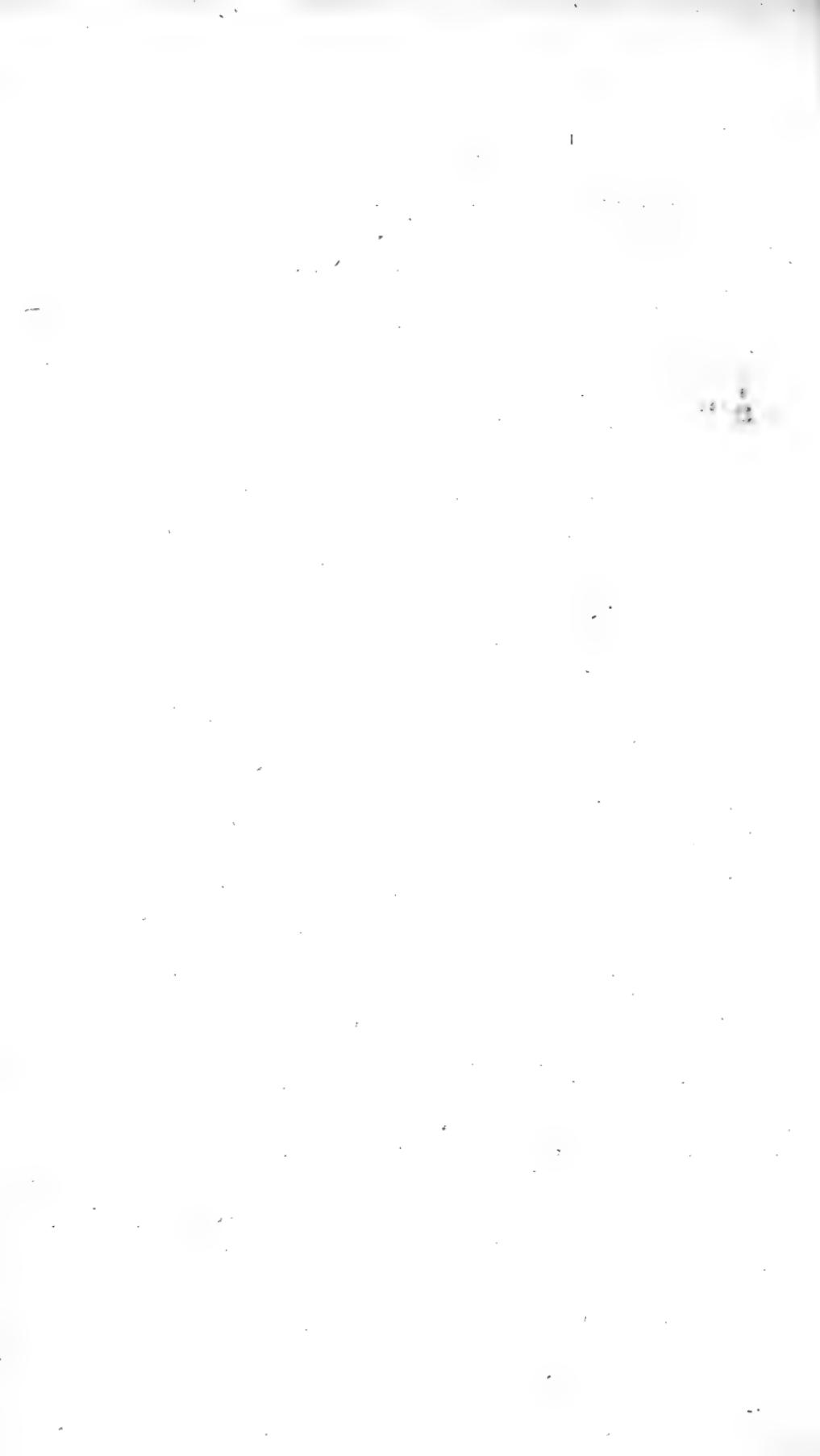
Linnæus and *Pennant.*

SPECIFIC CHARACTER.

GREEN PARRAKEET with lengthened tail, front and spot behind the eye crimson, and blueish crown.

N. B. *This species is extremely nearly allied to the Pacific Parrot of Latham.* vol. 1. p. 252.

The beautiful Parrakeet figured on this plate is a native of New Holland, and is one of the numerous new species of birds very lately made known to the naturalists of Europe. Its size is that of a small turtle.



PLATALEA AJAJA.



CHARACTER GENERICUS.

Rostrum planiusculum: apice dilatato, orbiculato, plano.

Pedes tetradactyli, semipalmati.

Lin. Syst. Nat. p. 231.

CHARACTER SPECIFICUS, &c.

PLATALEA corpore sanguineo.

Lin. Syst. Nat. p. 231.

PLATALEA rosea.

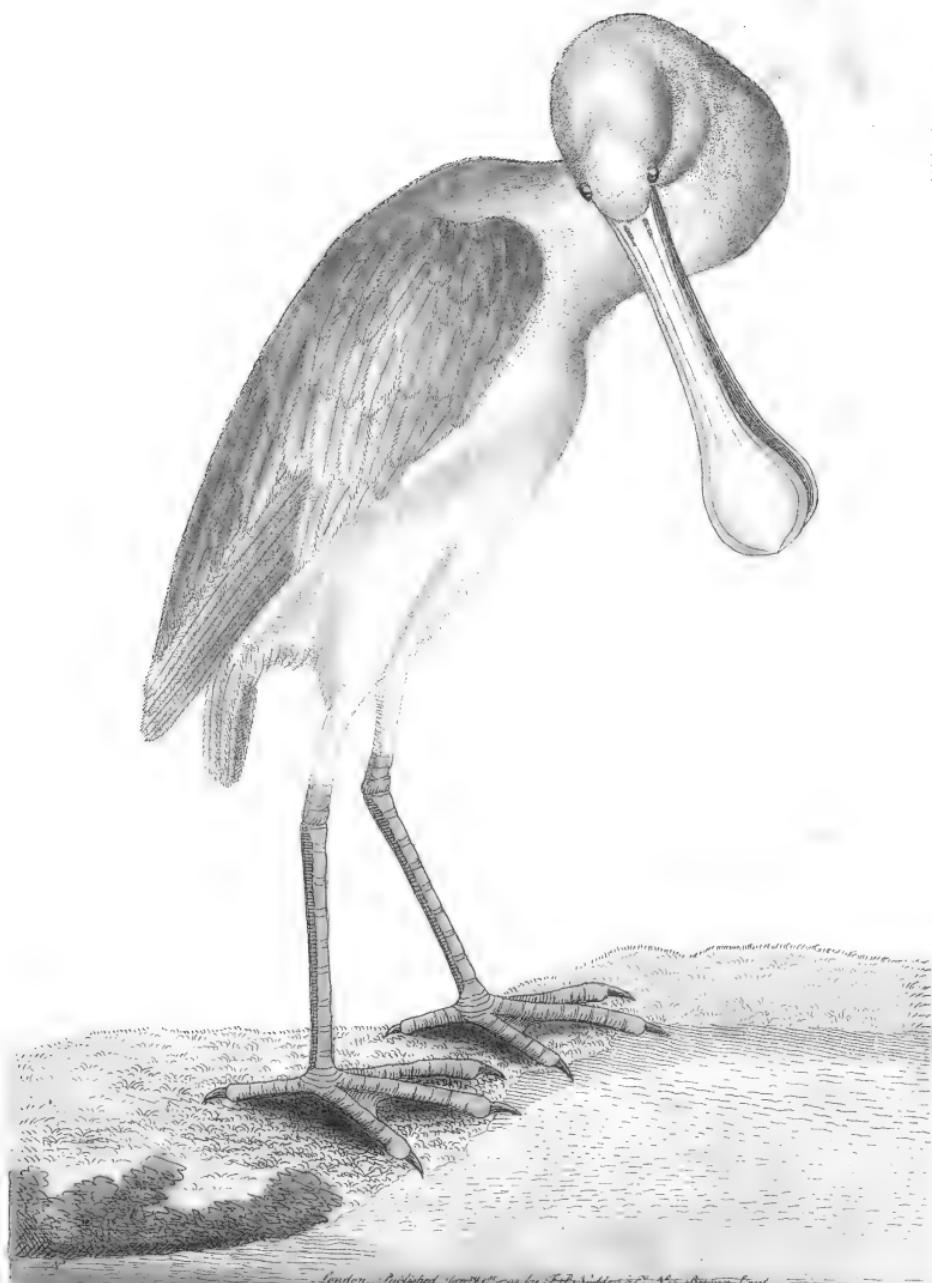
Briss. Av. 5. p. 356. t. 30.

PLATALEA brasiliensis AJAJA dicta.

Marcgr. bras. 204.

Plataleæ leucorodiæ Linnæi, seu communi, corporis forma simillima est eximia hæc avis; coloribus autem longe discrepat: universa enim, exceptis rostro pedibusque, pulcherrime rosea est, alarum parte superiori dorsoque phœniceis. Fertur autem ætate grandior pleneque et perfecte plumata, tota esse penitus latae phœnicea, vel etiam coccinea; collumque inferius torque seu cingulo nigro ornari. Rostrum fusco-pallet. Crura fere nigricant. Vivit eodem modo quo Platalea communis,

munis, seu leucorodia, littora nempe locaque aquofa
quærens, animaliaque minora, ranas scilicet, vermes,
et alia ejusmodi depascens. Americam incolit Austral-
lem.



THE
ROSE-COLOURED SPOON-BILL.



GENERIC CHARACTER.

Bill flattish, with dilated, orbicular, flat tip.
Feet 4-toed, semi-palmated.

SPECIFIC CHARACTER, &c.

SPOONBILL with crimson plumage.

SPATULE couleur de rose.

Buff. pl. enl. n. 165.

ROSEATE SPOONBILL.

Lath. Syn. 3. p. 16.

This elegant bird, which is a native of South America, in its general shape bears a near resemblance to the *Platalea leucorodia* of Linnæus, or common Spoonbill, but differs widely in color; the whole bird, except the beak and legs, being generally of a fine full rose-colour, which on the upper part of the wings and the back, deepens almost into crimson. It is said however, that the bird, when advanced in age, and in full perfection of plumage, is entirely of a vivid crimson, or even scarlet, with the addition of a black circle or collar round the lower part of the neck. The bill is of a

pale brown: the legs blackish. In its manner of life it resembles the European or common Spoonbill; frequenting the shores and watery places, and feeding on the smaller aquatic animals, as frogs, worms, &c.

MONOCULUS POLYPHEMUS.



CHARACTER GENERICUS.

Pedes natatorii,

Corpus crusta testum.

Oculi (plerisque) approximati, testæ innati.

CHARACTER SPECIFICUS, &c.

MONOCULUS testa antica convexa lunata, cauda triquetro-subulata.

MONOCULUS testa convexa futura lunata: postica dentata, cauda subulata longissima.

Lin. Syst. Nat. p. 1057.

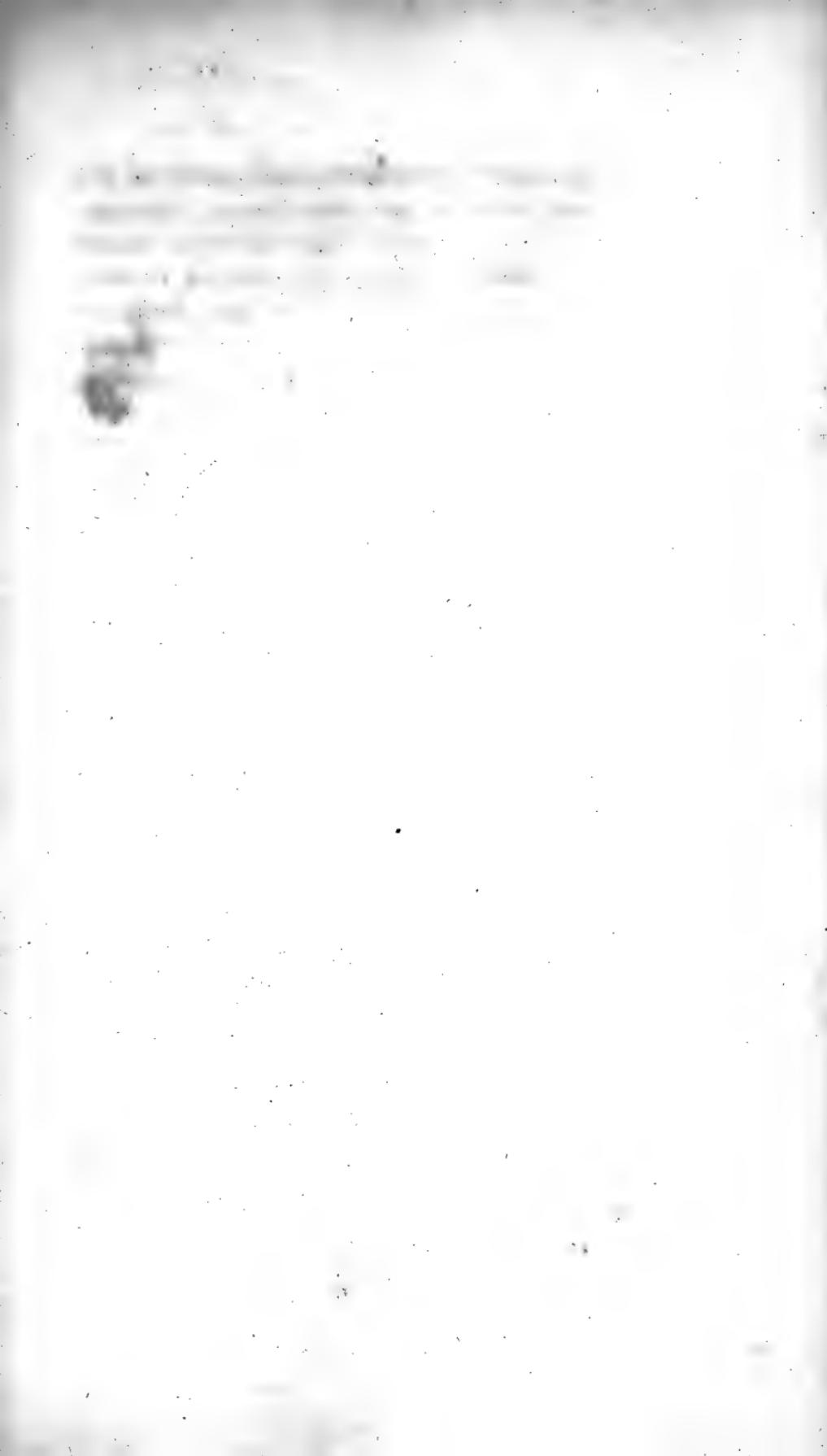
Clus. exot. l. 6. c. 14. p. 128.

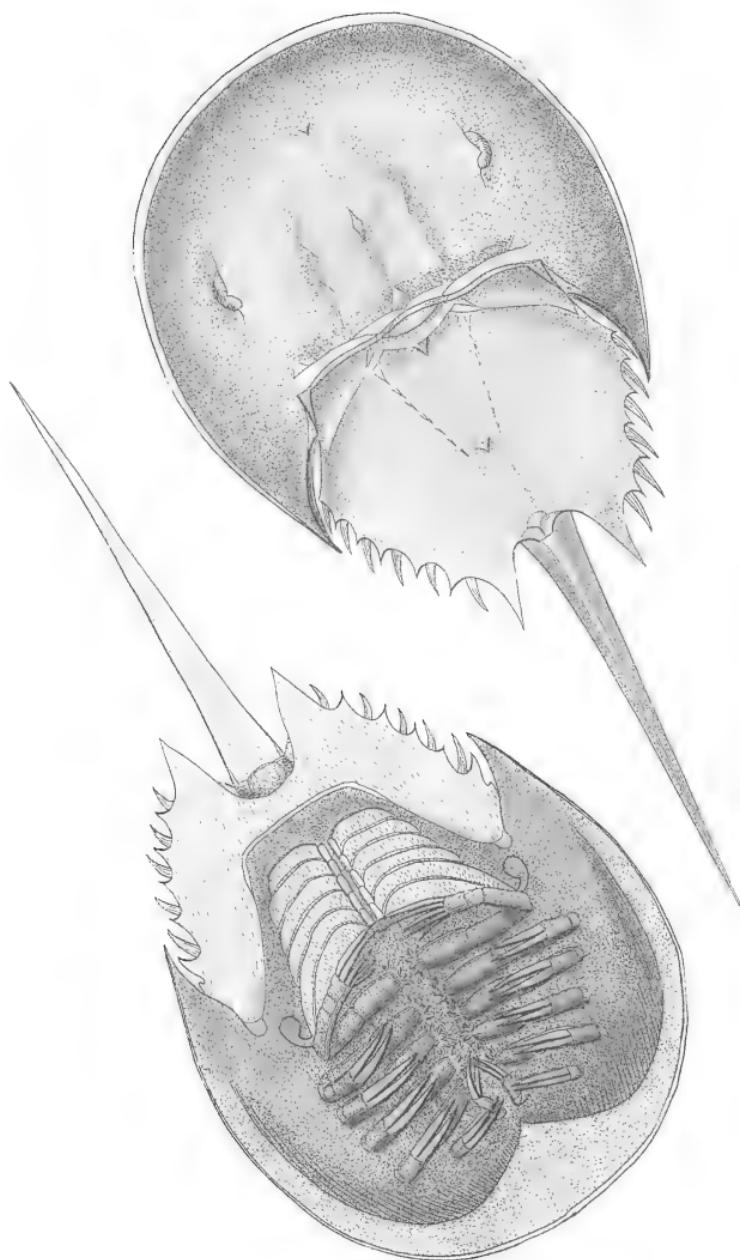
Bont. jav. l. 5. c. 31.

Monoculum dicitur hoc genus, quod oculi, ut plurimum, sibi invicem adeo appropinquant, ut primo intuitu unicus esse oculus videantur. Aliquarum tamen specierum oculi, et præsertim ejus de qua jam agitur, sunt alter ab altero valde remoti. Animal quod repræsentat tabula, omnium proculdubio est maximum, quotquot inter insecta numerare hodiernis visum est physicis: est enim illi corpus, extra caudam, interdum bipedale in longitudinem. Linnæus dicit "insectorum omnium facile

facile maximum." Oceanum Indicum incolit, et, (ut fertur) bina plerumque simul conspicuntur, scilicet mas et fæmina prope natantes. Pleraeque hujus generis species parvula sunt infecta in aquis dulcibus viventia, quorum multa adeo sunt minuta, ut inter animalcula microscopica numerentur. Qui intimas et minus cognitas Naturæ partes scrutari solent, et innumera animalculorum agmina quibus aquæ scatent, attentius examinare, ii fane summa cum voluptate conspiciant necesse est varias hujus generis species, quæ fine ope microscopii vix videndæ, characteribus tamen genericis plane demonstrant certissimum esse illis cum ingenti et gigantea specie de qua jam loquimur, cognitionis vinculum. Hæc animalcula mensibus æstivis in omnibus fere aquis stagnantibus facilime reperiuntur; eorum etiam nonnulla a scriptoribus microscopicis, Bakero præcipue, non fane eleganter, satis tamen accurate delineantur, et exempla sunt miræ quoad magnitudinem differentiæ quam in ejusdem generis animalibus non possumus non observare.

Huic descriptioni Monoœuli Polyphemî non abs refit addere, quod tunica oculi externa, quæ in aliis insectis e convexitatibus innumeris basi hexagona inclusis constat, in hoc, attestante Domino André (Phil. Trans. t. 72.) e corpusculis plurimis conicis sit conflata. Posset etiam observari quod oculi multarum parvularum Monoœuli specierum, ab oculis aliorum insectorum structura et aspectu differunt, et velut e pluribus ocellis seu globulis tunica communi contentis, componi videntur. Notandum præterea est genus Monoœuli generi Cancri (quod astacos omnes et cancros includit) valde esse affine.





THE
INDIAN MONOCULUS.



GENERIC CHARACTER.

Feet formed for swimming.

Body covered by a crustaceous shell.

Eyes (in most species) approximated, fixed in the shell.

SPECIFIC CHARACTER, &c.

MONOCULUS with the anterior part of the shell lunated, and long, triangular, sharp-pointed tail.

The INDIAN MONOCULUS, MOLUCCA CRAB, or KING-CRAB.

The name Monoculus was bestowed on this genus of insects from the circumstance of the eyes being generally seated so near each other, as, upon a cursory view, to appear as if single. In some species however, (as in the present,) it happens that they are really very remote from each other. Of all the animals which modern naturalists have agreed to distinguish by the appellation of Insects, the creature figured on this plate is by far the largest yet known; specimens being sometimes seen of two feet in length, exclusive of the tail. Linnæus calls

calls it “ *insectorum omnium facile maximum.* ” It is a native of the Indian ocean, and is said to be generally found in pairs, or male and female swimming together. Most of the species of *Monoculus* are small fresh-water insects, and some of them even belong to the tribe of microscopic animalcules. To those who are accustomed to penetrate into the less conspicuous provinces of Nature, and to investigate the legions of animated beings with which the waters in particular are peopled, it must afford a pleasing entertainment to view several species of this genus, which though scarce perceptible without the assistance of the microscope, yet with respect to their generic characters, bear the most striking resemblance to the gigantic species just described. These minute *Monoculi* are very common animalcules, and may be found in the summer months in almost all stagnant waters. Some of them are figured, (though not very elegantly, yet with sufficient exactness,) in Baker’s works on the microscope, and may serve as curious examples of the wonderful disparity of size which sometimes takes place in animals of the same genus.

To what has been said of the *Monoculus Polyphemus*, I should not omit to add, that the eyes in this animal, according to the observations of Mr. André, (Phil. Trans. vol. 72.) consist of a great number of very small cones, in which respect they differ from those of most other insects, in which the outward coat of the eye is composed of innumerable slight convexities, each bounded by an hexagonal outline. It may be proper to add, that the eyes of most of the smaller species of *Monoculi*

Monoculi differ in their structure and appearance from those of the generality of insects, and seem composed of a number of smaller eyes or globular parts united by the same external tunic. It may also be observed that the genus *Monoculus* is very nearly allied to that of *Cancer*, which contains the *Crab* and *Lobster* tribe.

PAPILIO ULYSSES.



CHARACTER GENERICUS.

Antennæ apicem versus crassiores, sæpius clavato capitatae.

Alæ (sedentis) erectæ sursumque connientes,
(volatu diurno.)

CHARACTER SPECIFICUS.

PAPILIO alis caudatis nigris, disco cæruleo radiante; posticis subtus ocellis septem.

Lin. Syst. Nat. p. 748.

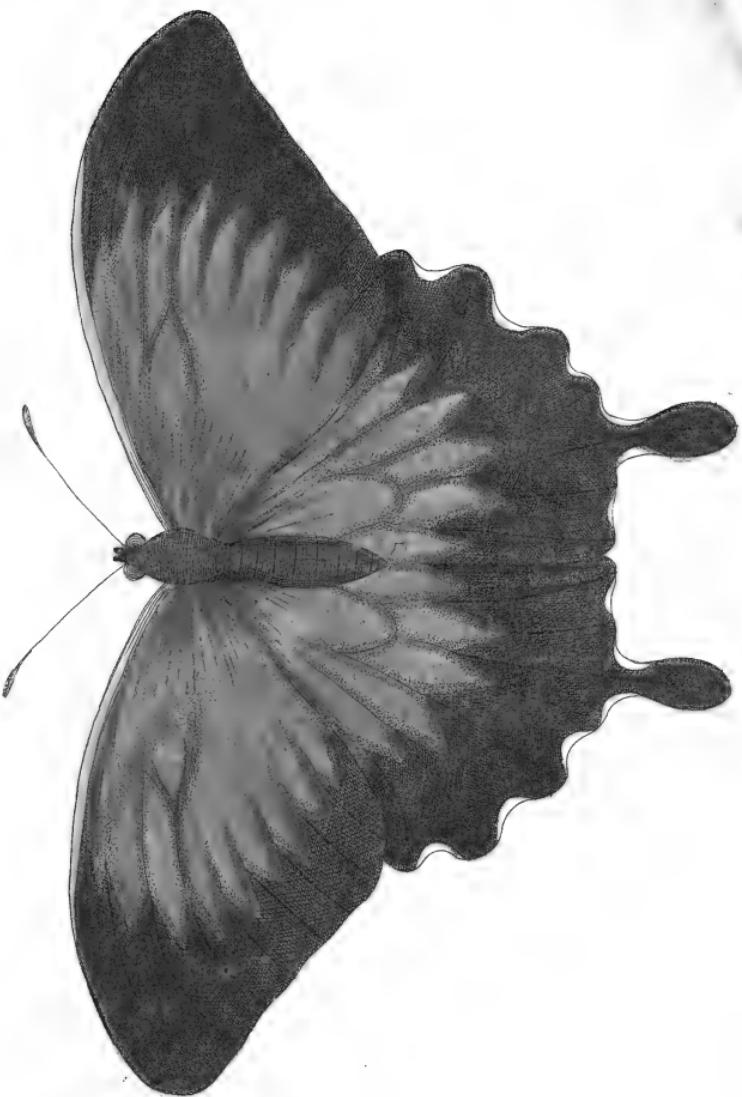
Fabr. Spec. inf. 2. p. 13. *Eq. Archiv.*

Clerk. ic. t. 23.

Cram. pap. 11. t. 121.

Insolitæ pulchritudinis est Ulysses. Alæ sunt nigerimæ et quasi holosericæ; area autem seu pars media plaga magna amænissime cærulea impletur, cum ad oras pertigerit radiata. Exemplo est hoc insectum papilionum caudatorum, in quibus scilicet alæ posticæ in processus seu quasi caudas excurrunt. Afiaæ est incola Ulysses. In quibusdam speciminiibus color alarum fuscus est potius quam niger. Superficies inferior nigra est, prope apices rufo tincta; alarumque posticarum oræ serie macularum ocellatarum cæruleo-rufescentium, albo nigroque fimbriatarum, decorantur.





ULYSSES,

OR

THE RADIATED BUTTERFLY.

GENERIC CHARACTER.

Antennæ or Horns thickening towards their extremity, and generally terminating in a knob, or club-shaped tip.

Wings (when fitting) erect, and meeting upwards.
(*Flight diurnal.*)

SPECIFIC CHARACTER.

BUTTERFLY with tailed black wings, the middle-part blue and radiated, with 7 ocellated spots on the under surface of the lower wings.

This is an insect of uncommon beauty. The wings are of the deepest velvet black, while the area or middle part of each is possessed by a very large bed of the most exalted blue that can possibly be conceived, and which terminates in a radiated manner round the edges. This insect also affords an example of the caudated papilios, in which the lower wings are furnished with a pair of appendages resembling tails. It is an Asiatic insect. The ground-colour in some specimens is rather brown than black. The under surface is black, tinged with

with rufous near the tips, and the edges of the lower pair are ornamented by a series of large ocellated spots, of a reddish colour tinged with blue, and edged with black and white.

PSITTACUS EXIMIUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili, cera instructa.

Nares in rostri basi.

Lingua carnosa, obtusa, integra.

Pedes scandentes.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS macrourus varius, capite gula pectore crissoque coccineis, dorso nigro flavo-viridi undulato, alis caudaque cæruleis.

Rostrum pallidum. Pedes nigricantes. Rectrices duæ intermediæ virides.

A Nova Hollandia nuperrime illata est hæc avis, et jam primo depingitur. De splendido ejus ornatu speciatim differere supervacaneum foret, cum figura varios colores exquisite ostendit. Magnitudine et forma generali psittaco superbo seu Pennantii simillima est.





London, Published Feb. 26. 1792, by F. & G. Nodder, 80, &c. Brewer Street.

THE
NON PARÉIL PARROT.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.

Nostrils roundish, placed in the base of the bill.

Tongue fleshy, broad, blunt at the end.

Legs short. Toes formed for climbing, viz. two forward and two backward.

SPECIFIC CHARACTER.

LONG-TAILED VARIEGATED PARROT,
with head throat breast and vent crimson,
back black undulated with yellow-green,
blue wings and tail.

The two middle tail-feathers are green

This bird is a species hitherto undescribed; having been very lately brought from New Holland. To particularize the richness of its robe would be unnecessary; the figure accurately shewing all its variegations of colour. In size and general form it is strongly allied to the Pennantian Parrot.



COLUBER NASICORNIS.



CHARACTER GENERICUS.

Scuta abdominalia.

Squamæ subcaudales.

Lin. Syft. Nat. p. 275.

CHARACTER SPECIFICUS.

COLUBER subolivaceo-ferrugineus, nigro irroratus, maculis dorsalibus pallidis nigro circumscriptis, fascia laterali undulata pallida.

Abdomen pallide ochraceum fuliginofo-maculatum.

Scuta abdom: 127.

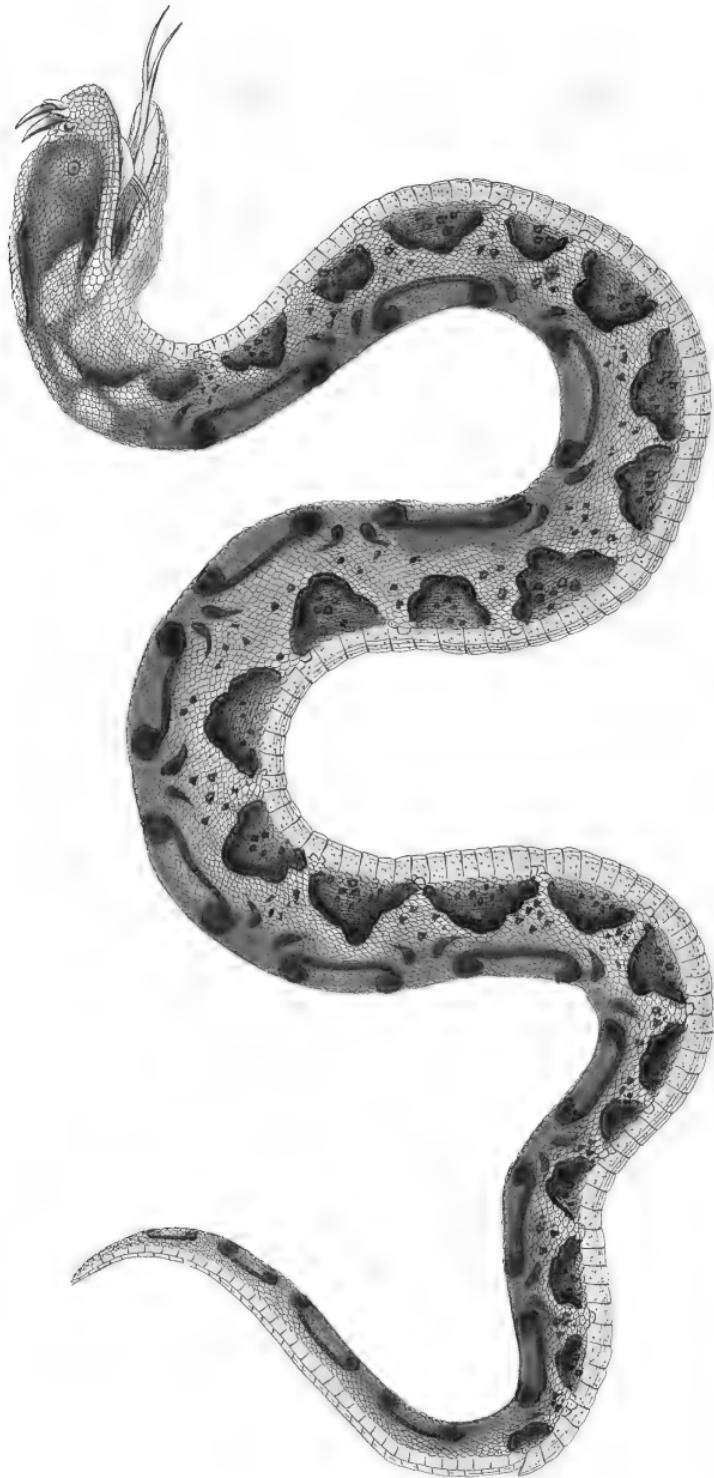
Squam: *subcaud:* circiter 32.

Inter species hucusque ignotas numerandus est Coluber nasicornis. E numero est diorum istorum serpentum quorum morsus in calidioribus mundi partibus, mortem inferre solet celerem et luctuosam. Si totum fere genus serpentinum horrescunt plurimi homines in hujusmodi investigationibus minus versati, quanto majori metu putemus illos percuti, qui in vivum hunc colubrum inopinato inciderint; quem totum horrificum deformat vultus præter modum torvus et atrox. Cornua enim gerit duo magna et acuminata, (non, qualia Cerasis,) supra oculos; sed super nasum seu summum maxillæ

maxillæ superioris sita. Erecta propemodum sunt, paullum tamen retro flectuntur, extrinsecusque ab utroque latere. Non omnino cornea sunt, sed quodammodo flexibilia, forma fere triangulari sive triquetra. Longa sunt circiter dimidium unciae, et a basi utraque exstat squama dura ejusdem fere formæ cum ipsis cornubus; quo fit, ut duo quasi minora cornua exurgere videantur. Os illi, ut aliis venenatis serpentibus, telis tubulatis duobus utrinque munitur, quæ, cum maxima sint, vulnus sævissimum possunt infligere. Horum minora sunt postica. Longus est Coluber nasicornis uncias circiter triginta quinque. Coloris est fusco-flavescens, maculis parvulis nigricantibus creberrime irrorati. Per totam dorsum longitudinem, magnis intervallis, decurrit series macularum fusco-flavescens, majoribus nigris immersarum; protenditurque per utraque latera a capite ad caudam fascia angusta, ochracea, acute flexuosa, cuius pars inferior seu ventri proxima, nigrior multo est quam reliquum corpus. Venter obscure ochraceus est, seu cinereo-flavus, labeculis variis nigricantibus notatus; sparguntur insuper per totum corpus huc, illuc, maculæ plurimæ diversæ magnitudinis. Cauda tenuis brevisque pro corpore. Squamæ asperæ duræque et insigniter carinatæ. Caput squamis parvis tegitur, parsque superior maculam habet permagnam fuscam, utrinque in processus acuminatos excurrentem. Latera capitis plumbeo, seu cinereo colore cinguntur. Caput ipsum latum et depresso, genæque fusco et flavicante variæ.

Captum fuisse putem hunc serpentem cum jam exuvias depositurus esset; squamæ quippe exteriore a subja-

subjacentibus facile separantur, quæ, hoc facto, lucidiores videntur; immo circa ventrem fere albescunt, maculis nigrioribus notatae. Colubrum nasicornem accepit Dominus EDWARDUS JENKINS in oppido vulgo dicto *Charles-Town* in Carolina Australi degens, a navarcha e Guinea profecto, illoque nuperime Museum Britannicum ditavit. Notum esse eum creditur in interiori Africa.



THE
HORN-NOSED SNAKE.



GENERIC CHARACTER.

Transverse *Lamellæ* under the abdomen.

Broad alternate *Scales* under the tail.

SPECIFIC CHARACTER.

OLIVE-BROWN SNAKE, freckled with blackish, with a row of pale dorsal spots surrounded by black, and a flexuous pale fascia on the sides.

The abdominal plates are 127. The subcaudal scales about 32.

The belly is of a pale olive-colour with dusky spots.

The snake here represented must be considered as a species hitherto unknown, and adds to the number of those malignant reptiles whose bite, in the hotter regions of the globe, proves the dreadful forerunner of a speedy and painful death. If at first glance of most of the serpent-tribe an involuntary sort of horror and alarm is so often felt by those who are unused to the examination of these animals, how much greater dread must the unexpected view of the species here exhibited be supposed to inflict? when to the general form of the creature

ture is superadded the peculiar fierceness and forbidding torvity with which nature has marked its countenance; distinguished by the very uncommon appearance of two large and sharp-pointed horns, situated, (not as in the Ceraastes, above the eyes,) but on the top of the nose, or anterior part of the upper jaw. They stand nearly upright, but incline slightly backwards and a little outwards on each side, and are of a substance not absolutely horny, but in some degree flexible. Their shape is somewhat triangular or three-sided. They are about half an inch in length, and at the fore-part of the base of each stands an upright strong scale, of nearly the same shape with the horn itself, and thus giving the appearance of a much smaller pair of horns. The mouth is furnished with extremely large and long fangs or tubular teeth, situated as in other poisonous serpents, and capable of inflicting the most severe wounds: two of these fangs appear on each side of the mouth, of which the hinder pair are smaller than the others. The length of this animal is about thirty-five inches. Its colour is a yellowish olive-brown, very thickly sprinkled all over with minute blackish specks. Along the whole length of the back is placed, at considerable distances, a series of yellowish-brown spots or marks, each of which is imbedded in a patch of black; and on each side the body, from head to tail, runs an acutely flexuous or zig-zag line or narrow band, of an ochre-colour. This band is bounded beneath by a much deeper or blacker shade than on the rest of the body. The belly is of a dull ochre-colour or cinereous yellow, freckled with spots and markings

markings of blackish. Besides these there is a number of black spots of different sizes here and there dispersed over the whole snake. The tail is somewhat thin and short in proportion to the body. The scales of this snake are harsh and stiff, and are very strongly carinated. The head is covered with small scales, and is on its upper part marked by a very large longitudinal patch of brown, running out into pointed processes at the sides, and bounded by a space of dull lead-colour or cinereous. The shape of the head is broad and flattened: the cheeks are variegated with blackish and yellow. It seems to have been taken at a period not far distant from that of casting its skin; as the exterior scales separate easily from the subjacent ones, which then appear of a clearer and lighter colour than before, and the yellowish variegations on the sides and belly approach to a whitish colour, with darkish spots and marks. This snake is supposed to be a native of the interior parts of Africa, and was obtained from the master of a Guinea vessel by the Rev. EDWARD JENKINS of Charles-Town, South Carolina, by whom it was lately presented to the British Museum.

MANTIS STRUMARIA.



CHARACTER GENERICUS.

Caput nutans, maxillosum, palpis instruatum.

Antennæ (plerisque) fetaceæ.

Alæ quatuor, membranaceæ, (plerisque) convolutæ; inferiores plicatæ.

Pedes antici compressi, subtus ferrato-denticulati, armati ungue solitario et digito fetaceo laterali articulato. *Postici* quatuor, læves, grefforii.

Thorax linearis, elongatus, angustatus.

Lin. Syst. Nat. p. 689.

CHARACTER SPECIFICUS, &c.

MANTIS thorace utrinque membranaceo-dilatato obcordato.

Lin. Syst. Nat. p. 691.

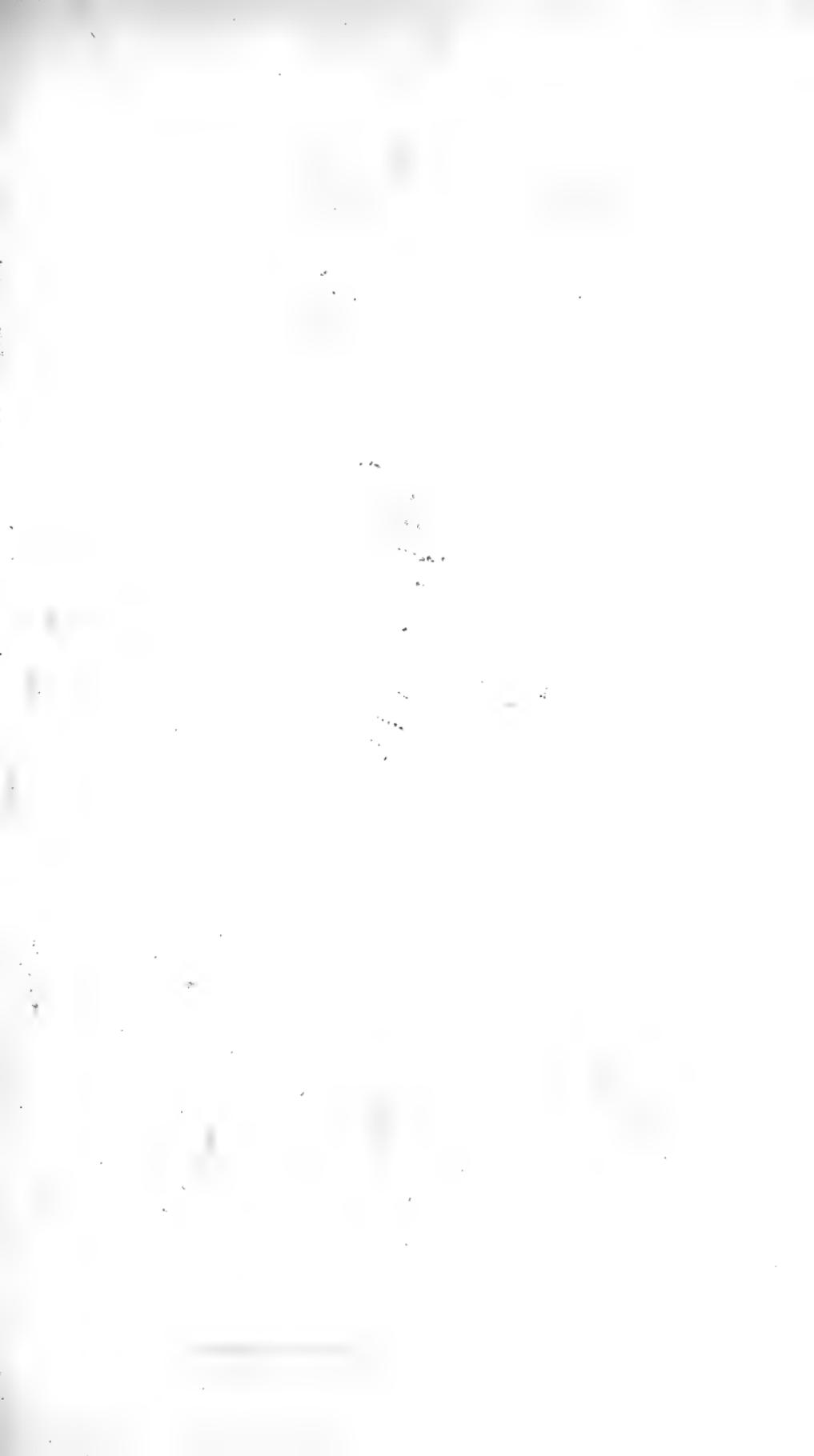
Roef. inf. 2. gryll. t. 3.

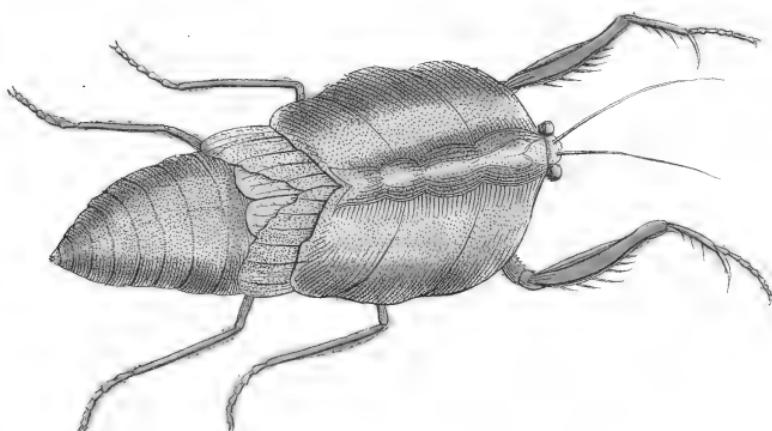
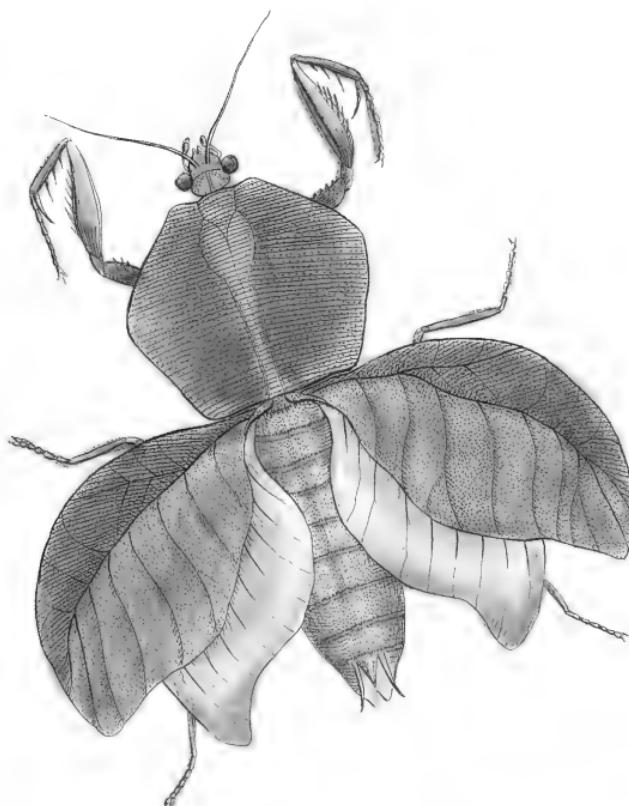
Mer. Sur. 27. t. 27.

Cum anteactis temporibus, fabulis et erroribus immerita jaceret veritas, non defuere qui hujusmodi insectoria folia esse quasi animata firmiter credididerint. Notabilis admodum est thorax permagnus et dilatatus. Alæ inferiores

feriores pellucidæ sunt, levissimo tantum virore tinctæ.
Americam Australē incolit singulare hoc animal-
culum.

Fig. 1, Pupa, seu insectum adhuc imperfectum.
Fig. 2, Imago, seu insectum declaratum.





PLV

London, Published February 1792 by F. D. Waller & C. 1916 Brewer Street.

THE
BROAD-BREASTED MANTIS.



GENERIC CHARACTER.

Head unsteady: Mouth armed with jaws, and furnished with palpi.

Antennæ setaceous, (some few species excepted.)

Wings four, membranaceous, in most species convoluted: the lower ones (generally) plicated.

Feet *anterior* compressed, serrated beneath, armed with a lateral solitary claw and jointed process; *posterior* four, smooth, formed for walking.

Thorax (in most species) elongated and narrowed.

SPECIFIC CHARACTER, &c.

MANTIS with the sides of the thorax nearly membranaceous and greatly dilated.

Mer. Sur. t. 27.

Roef. 2. *gryll.* t. 3.

The Mantis Strumaria is amongst the number of those insects which in less enlightened times have been considered as a kind of animated leaves. The very large, dilated thorax in this insect is highly remarkable.

The

The lower wings are of a transparent appearance, and have but a slight cast of green. This curious animal is a native of South America.

Fig. 1, The insect in its pupa state.

Fig. 2, The insect in its complete state.

PSITTACUS PULCHELLUS.



CHARACTER GENERICUS.

Rostrum aduncum: mandibula superiore mobili,
cera instruēta.

Nares in rostri basi.

Lingua carnoſa, obtusa, integra.

Pedes scansorii.

Lin. Syst. Nat. p. 139.

CHARACTER SPECIFICUS.

PSITTACUS macrourus viridis, subtus luteus,
capistro alisque cæruleis.

Rostrum pedesque nigricant.

Inter minimas sui generis numeranda est hæc species, non longe enim superat magnitudine figuram quæ in tabula continetur. Notabile est hanc avem, parvula licet sit, magno illi psittaco qui Ararauna dicitur, primo intuitu admodum similem esse. Species procul dubio nunquam adhuc descripta est, et novam Hollandiam incolit.





London, Published March 1779 by T. & R. Sowerby
Engraved by J. S. Smith, 1779. Price, One Shill.

THE
TURCOSINE PARRAKEET.



GENERIC CHARACTER.

Bill hooked. Upper mandible moveable.
Nostrils roundish, placed in the base of the bill.
Tongue fleshy, broad, blunt at the end.
Legs short. Toes formed for climbing, viz. two backward and two forward.

SPECIFIC CHARACTER.

LONG-TAILED GREEN PARRAKEET, yellow beneath, with blue wings and frontlet.

The beak and legs are black.

This may be numbered amongst the smallest of its tribe, not very much exceeding in size the figure here represented. It is remarkable that this diminutive species bears at first view a considerable resemblance to the *Psittacus Ararauna*, or great blue and yellow Maccaw. It is an undoubted non-descript, and is a native of New Holland.

SILURUS CALLICHTHYS.



CHARACTER GENERICUS.

Caput nudum. Os cirris aliquot filiformibus tentaculatum.

Membr. branch. radiis 4—14.

Corpus: Radius pinnarum pectoralium aut dorsalis primus spinosus, retrodentatus.

Lin. Syft. Nat. p. 501.

CHARACTER SPECIFICUS, &c.

SILURUS pinna dorsali postica uniradiata, squamis ordine duplii, cirris quatuor.

Lin. Syft. Nat. p. 506.

Amæn. acad. 1. p. 317. t. 14. f. 1.

Gron. mus. 1. n. 70.

Seb. mus. 3. t. 29. f. 13.

Squamaram quibus pisces muniuntur, pulchritudo et diversitas, observationum microscopicarum studiosis amplissimam diu præbuerunt materiem. Nonnullis sunt squamæ ovatæ, annulis concentricis fibrarum reticulatarum ornatæ: aliis fere quadratæ, fibris in divisiones inæquales dispositis, marginibus aculeorum pellucidorum serie distinctis. Quarundam specierum squamæ ob exigui-

exiguitatem primo visu vix discerni possunt; aliarum non modo minimas sed et muco denso coopertas attentissima oculorum acie investigare necesse est. Sunt e contrario pisces qui squamis teguntur amplissimis; quod insigniter evenit in peculiari illa varietate, (ni potius distinctam speciem putemus) Cyprini, nomine Cyprini *Regis* distincti; cuius squamæ quadrantem diametri ipsius corporis æquant. Non desunt denique exempla piscium ad diversissima genera pertinentium, quorum squamæ amplissimæ et durissimæ a reliquis in tantum discrepant, ut prima facie ad ipsa animalia crustata videantur accedere. Hos vocat Linnæus *cataphractos*, quod scilicet quasi lorica muniantur. Ejusmodi principes sunt *Silurus cataphractus*, *Silurus Callichthys*, *Cottus cataphractus*, *Trigla cataphracta*, *Loricaria cataphracta*. *Silurus Callichthys*, quem ostendit tabula, tum Europam tum Americam inhabitat; plerumque autem in America Australi, et præcipue in Brasilia invenitur. Rivulos incolit, e quibus, si æstate fervidoire fere exsiccati fuerint, mirum diætu! se furripit, et per prata late evagatur, aquas altiores quæritans. E piscinis quoque in quibus servatus fit interdum crepit, margines seu aggeres perforando. Relictis tamen aquis, super terram incedere non solius est *Callichthys*; idem enim facere solent alii nonnulli; *Muræna præcipue Anguilla diæta*, quæ per prata noctu prorepit, limaces fortasse aliaque id generis prædatura; et si hyems fuerit severior, sub ipso etiam foeno et in cavernis latitans interdum deprena est. *Callichthys* longitudo communis est circiter quatuor pollices: color fusco-flavescens, dorso paulum obscuriore. Oculi minuti; et utrinque ad latera oris (ut in aliis ejusdem generis) tentacula duo longæ et magna extenduntur.



THE
WANDERING SILURUS.



GENERIC CHARACTER.

Head naked, large, depressed.

Mouth wide, generally furnished with long tentacula or beards.

First ray of the pectoral and dorsal fins commonly strong and serrated backwards.

SPECIFIC CHARACTER, &c.

SILURUS with a double range of scales, four beards, and the last dorsal fin single-rayed.

Gron. mus. 3. t. 29. fig. 13.

Marcgr. bras. 151.

The beautiful and varied structure which distinguishes the scales of fishes, has long afforded an extensive field for microscopical observation. In some the scales are of an oval shape, with concentric rings of reticulated fibres; in others of a squarish form, with the fibres curiously disposed into dissimilar patches or subdivisions, and ornamented at the extremities with a series of transparent aculei or prickles. In some fishes the scales are so extremely small as to be scarce distinguishable on a cursory view, and in some they are not only very small, but

but so coated over by a mucous tegument as to require the most attentive investigation in order to discover them. In others, on the contrary, they are as remarkable for their extreme largeness, as in the peculiar variety (if not distinct species) of *Cyprinus* or *Carp*, known by the title of the King-Carp, in which the scales are equal to a fourth part of the diameter of the fish. Lastly, there are not wanting some instances of fish belonging to very different genera, which are coated with scales of a size so very large, of a structure so uncommonly strong, and of a disposition so unlike that which appears in the scales of other fish, that they seem at first glance to belong to the crustaceous tribe. Fishes of this peculiar cast are termed by Linnæus *cataphractæ* or mailed fish, as if in suits of armour. Of these the most remarkable are the *Silurus cataphractus*, *Silurus Callichthys*, *Cottus cataphractus*, *Trigla cataphracta*, and *Loricaria cataphracta*. The *Silurus Callichthys*, here represented, is a native both of Europe and America, but is more common in South America than in Europe, being principally found in Brazil. It inhabits rivulets, and when these during a dry season grow extremely shallow, it has the extraordinary faculty of creeping out and traversing over the dry ground in order to seek deeper water. It has also been known to make its escape from fishponds in which it has been confined, by piercing through the banks. This terrestrially locomotion of fishes is not however confined to the *Callichthys*, but is known to take place in some others, and particularly in the common eel, which frequently creeps about meadows by night, in quest perhaps of slugs, &c., and has been known during the frosts of a severe winter to take refuge under hay-ricks

and

and in caverns. The general length of the *Callichthys*, is about four inches: its color is a yellowish brown, somewhat deeper on the back than on the other parts. The eyes are small, and on each side the mouth are situated (as in several others of this genus) two very large and long cirri or beards.

TUBIPORA MUSICA.



CHARACTER GENERICUS.

Animal Nereis?

Corallium tubis cylindricis, cavis, erectis, parallelis.

Lin. Syst. Nat. p. 1270.

CHARACTER SPECIFICUS, &c.

TUBIPORA tubis fasciculatis combinatis: diffimientis transversis membranaceis distantibus.

Lin. Syst. Nat. p. 1270.

PSEUDO-CORALLIUM RUBRUM.

Aldr. mus. 291.

ALCYONIUM FISTULOSUM RUBRUM.

Baub. hist. 3. p. 808. fig. 2.

TUBULARIA PURPUREA.

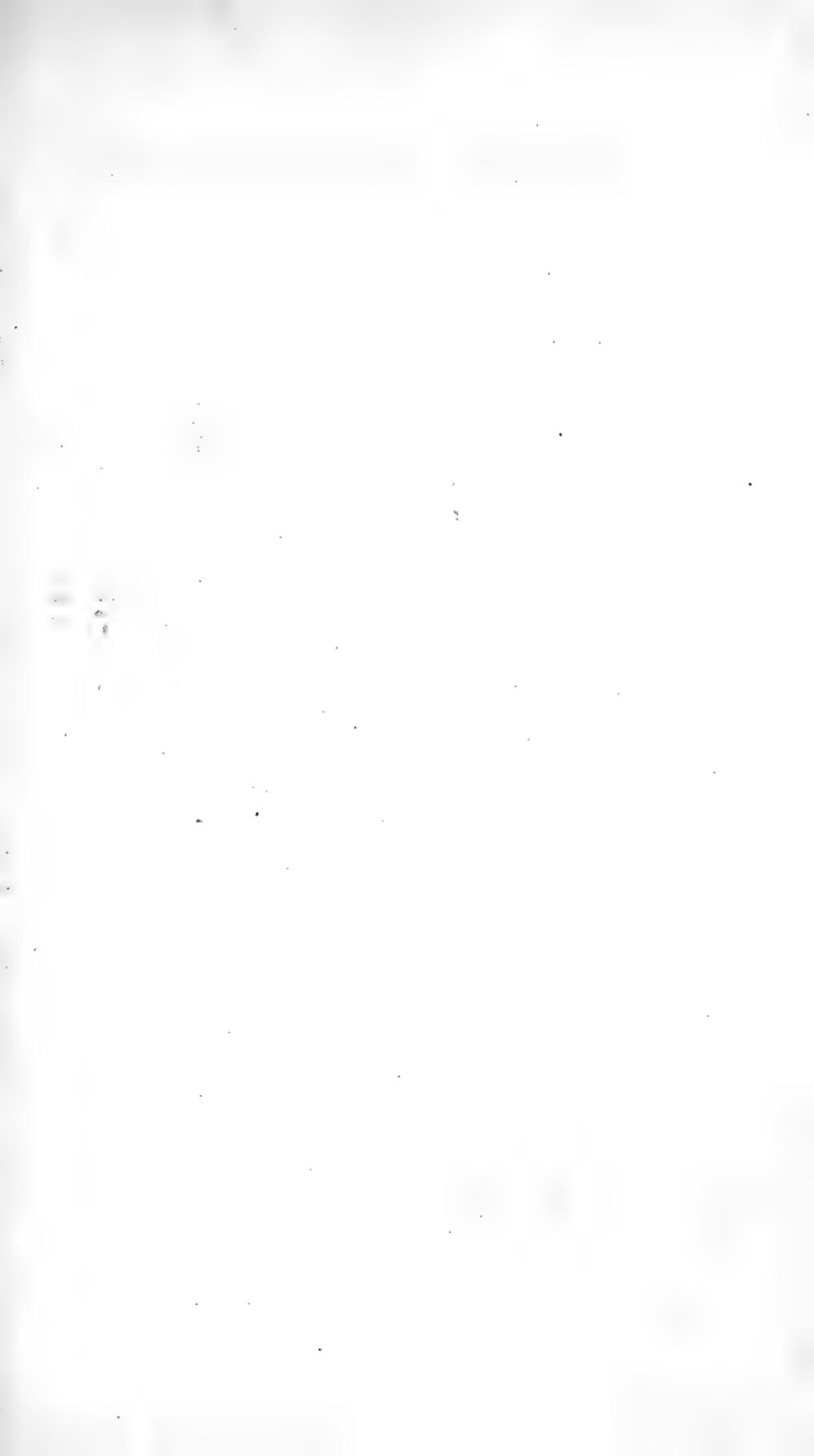
Tourn. inst. t. 342.

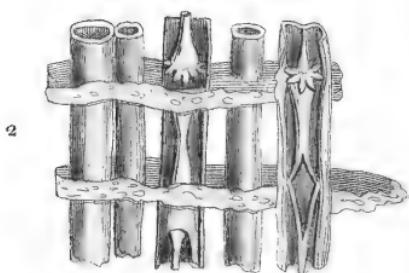
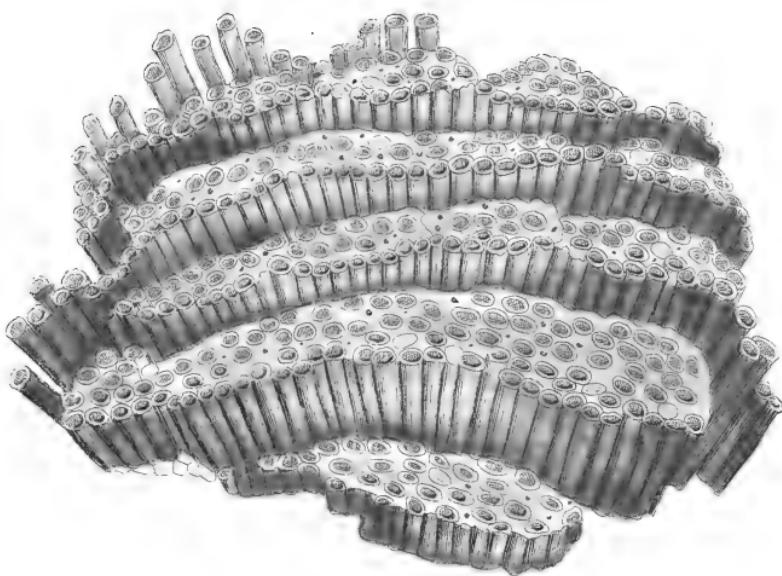
Iis lithophytis annumerandum est hoc corallium quorum si formam generalem spectes, vix possit dubitari quin ab animalibus efficta sint. Constat quippe tota massa e tubulis erectis et parallelis, alio super alium gradatim assurgente, qualiter fere fit in cellulis apum. Septa transversa quibus tuborum strata connectuntur, ascendunt inaequaliter in variis partibus, tubis ipsis raro unciam,

unciam, interdum semiunciam altis, eorundem diametro nunc decimam nunc octavam pollicis partem attingente. Ab hac tamen proportione in diversis speciminibus longe decadit. Vera animalium incolentium natura vix adhuc pro certo explorata est: ea tamen putat Linnaeus Nereidibus vix ac ne vix differre. Speciem hac pulchriorem vix fortasse inveniemus in toto genere corallino: structuræ enim ipsius elegantiam mire auget color suaviter purpureus seu phoeniceus. Si singuli tubi accuratius inspiciantur, patebit eorum unumquemque tubulum minorem geniculis aliquot seu septis radiatis divisum continere, cuius ope diversis stratis saepe cum se invicem communicatur. In magnam molem sese extendit formosum hoc corallium, nec defuere specimina quæ pedes duos immo tres diametro superarunt. Cum adhuc sit recens, tota superficies exterior gelata seu mucosa substantia obducitur, quæ etiam per partes tubulatas quodammodo diffundi videtur. Magna Tubiporæ mucicæ est copia circa littora insularum Indicarum nec non maris Pacifici.

Fig. 1, Pars aperta, et microscopio aucta, ut structura interior pateat.

Fig. 2, 3, 4, Tubuli separati magnitudine naturali.





CRIMSON TUBIPORE,
OR
ORGAN CORAL.



GENERIC CHARACTER.

Animal allied (probably) to the genus *Nereis*.
Coral consisting of erect cylindric parallel tubes.

SPECIFIC CHARACTER, &c.

TUBIPORE with fasciculated connected tubes,
and distant transverse membranaceous diffe-
piments.

Argenv. conch. t. 26. fig. A.

Ellis Zooph. p. 144. t. 27.

This is one of those Lithophytes which in structure and general appearance seem plainly to indicate the operation of animals, the whole mass consisting of an affortment of upright parallel tubes, rising over each other by stages, somewhat in the manner of the cells of an honeycomb. The stages or transverse diffepliments by which the strata of tubes are connected, are of unequal heights in different parts of the mass, and the tubes of each stratum seldom rise to the height of an inch, and sometimes do not exceed half an inch, and their diameter is from about a tenth to an eighth of

an

an inch. In different specimens however there is a considerable variation, both in the proportional length and diameter of the tubes. The real nature of the inhabiting animals of these tubes is not clearly ascertained, but they are supposed by Linnæus to be strongly allied to Nereides. In point of beauty scarce any of the coral tribe can exceed the present species; the colour, which is a rich purple or deep crimson, highly increasing the elegance of the fabric. The individual tubes, when accurately examined, appear each furnished with a smaller internal tube, which is divided at certain distances by radiated diaphragms or partitions. By means of these internal tubes the different strata often communicate with each other. This curious coral extends itself to a very considerable size; specimens having been frequently seen of from one to three feet in diameter. In its recent state the whole upper surface is coated over by a mucous or gelatinous substance, which seems to pervade the tubular texture of the whole coral. The *tubipora musica* is produced in the greatest abundance about the shores of the East-Indian islands and those of the Pacific Ocean.

Fig. 1, A piece laid open and magnified by the microscope, in order to shew the interior structure.

Fig. 2, 3, 4, Separate tubes of their natural size.

CASUARIUS AUSTRALIS.

CHARACTER GENERICUS.

Rostrum depresso, rectum, subconicum.

Nares ovatae.

Alæ brevissimæ, volatui inutiles.

Femora in parte inferiore denudata.

Pedes tridactyli, digitis omnibus anticis.

Cauda nulla.

Lath. ind. orn. p. 664.

CHARACTER SPECIFICUS, &c.

CASUARIUS FUSCUS, vertice inermi.

STRUTHIO CASUARIUS.

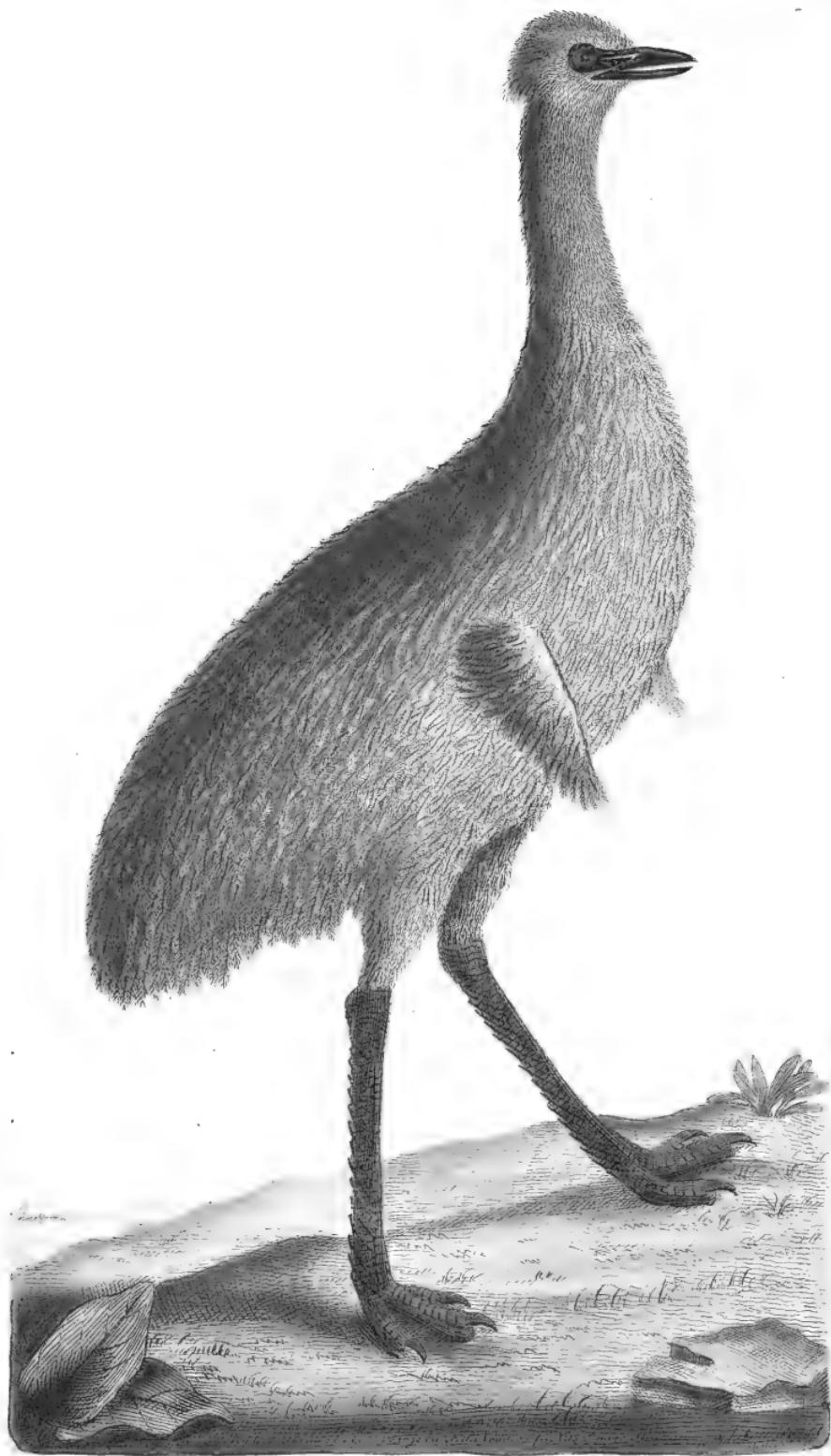
Lin. Syst. Nat. p. 265.

CASUARIUS NOVÆ HOLLANDIÆ.

Lath. ind. orn. p. 665.

Inter aves quas protulit ingens illa insula Nova Hollandia (ni continens potius appelletur) insignis est quæ in tabula depingitur Casuarii species; a communi seu Africana adeo discrepans, ut dubitari non possit illam penitus et revera diversam esse. Magnitudine enim est multo majori, alta interdum, ad minus, pedes septem. Color imus cinereo-fuscus, subtus pallidior. Caret caput galea seu crista illa cornea, quæ speciem commu-

nem distinguit. Collum præterea loco rugosæ illius et rubræ cæruleæque cutis, et caruncularum quæ in Africana conspicuæ, pennis parvis vestitur, per quas ipsa cutis in hac parte leviter cærulea vix ac ne vix discerni possit. In apicibus alarum, quæ ad volandum inutiles, unguiculus est incurvatus et acutus. Crura validissima, nigricantia, et in parte postica conspicue ferrata. Ros- trum ejusdem fere coloris cum cruribus.



THE
SOUTHERN CASSOWARY.



GENERIC CHARACTER.

Bill depressed, strait, nearly conical.

Wings extremely small, and unfit for flight.

Feet tridactylous, with all the toes standing forward.

SPECIFIC CHARACTER, &c.

DARK-BROWN CASSOWARY with unarmed head.

NEW-HOLLAND CASSOWARY.

White's Voyage, pl. 1. p. 129.

One of the most remarkable birds which the continent of New Holland has yet afforded is a species of Caffowary which differs from the common or African kind in so many respects as to leave no doubt of its being perfectly distinct. In size it is considerably superior to the common Caffowary, having been seen of the height of at least seven feet. Its general colour is a sort of cinereous brown, somewhat paler beneath. The head is destitute of that horny crest which so strikingly distinguishes the African species; and the neck instead of being furnished with a wrinkled longitudinal red-and-blue skin and wattles as in that bird, is covered

with small feathers, through which the skin, which is of a bluish colour in that part, is just visible. The wings are perfectly useless for flight, and at the tip of each is a small, sharp, crooked spur or claw. The legs are very strong, of a blackish colour, and of a serrated appearance on the hinder part. The beak is of nearly the same colour with the legs.

ARGONAUTA ARGO.



CHARACTER GENERICUS.

Animal *Sepia*.

Testa univalvis, spiralis, involuta, membranacea,
unilocularis.

Lin. Syst. Nat. p. 1161.

CHARACTER SPECIFICUS, &c.

ARGONAUTA carina utrinque subdentata.

Gmel. Syst. Nat. p. 3367.

NAUTILUS fulcatus.

Klein. offr. t. 1. f. 3.

NAUTILUS tenuis.

Rumpf. mus. t. 18. f. 1. 4. A. B.

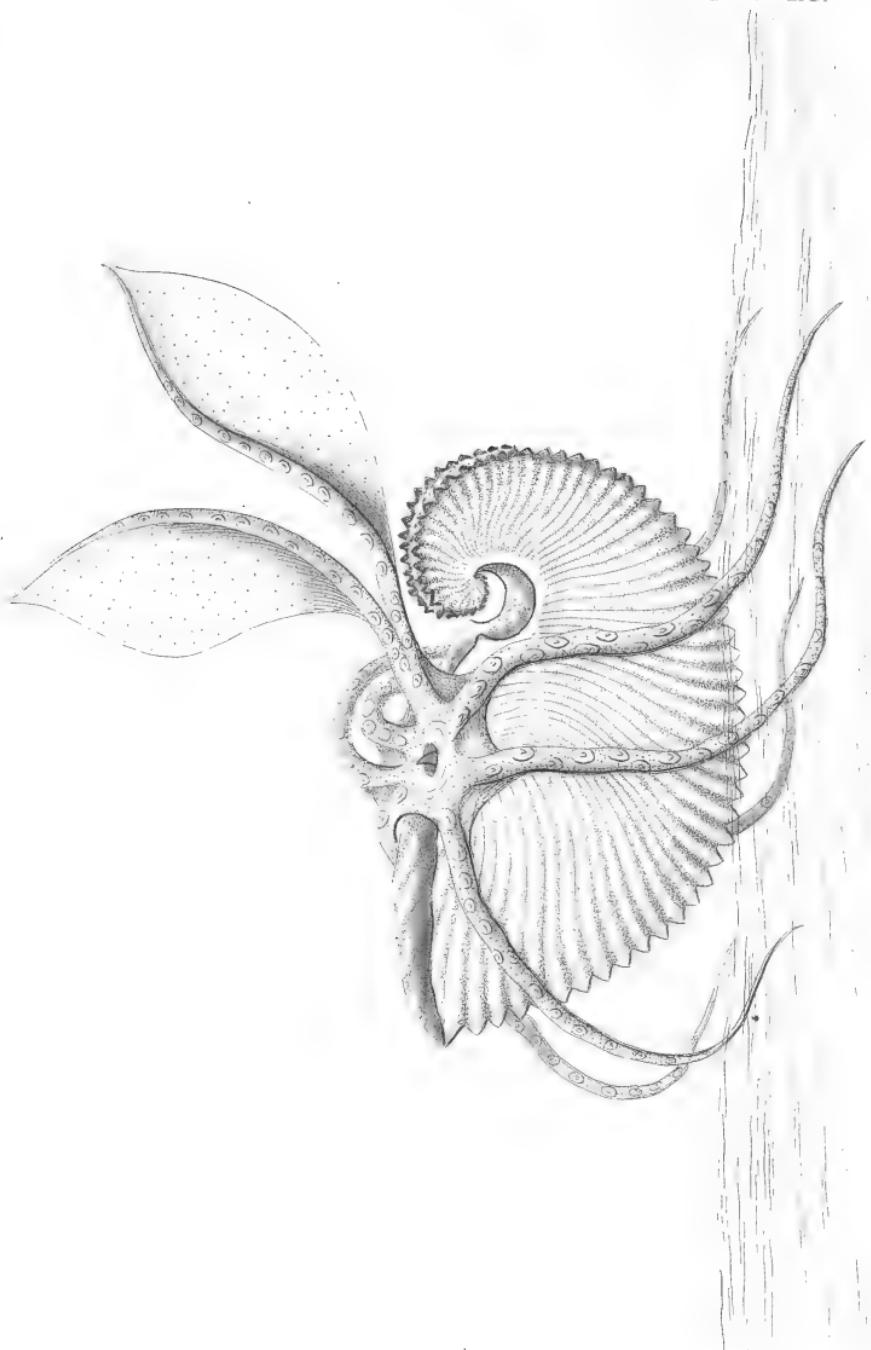
Utcunque inter animalia ejusdem familiæ eadem fere
sit formæ partiumque similitudo, pauca tamen proferri
possunt exempla, in quibus a normâ sua insigniter
aberrare solet natura; præcipue vero in classe testacea.
Testarum enim univalvium (ut dicuntur) incolæ, generi
Limacis simillimi sunt; bivalvium contra generibus
Tethyos et Ascidia. Formæ hujus anomalæ nullum
notabilius argumentum possit feligi quam in genere
Argonautæ; vel Nautili qui papyraceus dicitur: ab
omnibus enim aliis ejusdem divisionis adeo discrepat
animal

animal hanc testam inhabitans, ut illius verum esse et genuinum incolam non mirum sit si ægre credatur. Linnæus igitur de hac re scribit, “ Domunculam alienam, quemadmodum Cancer Diogenes seu Bernhardus, intraesse Sepiam, cum non connexa sit testæ, sibi adeo alienæ, qui non crederet, nisi tot testes nobis obstringerent, qui propriis oculis viderunt Argonautam velificantem ? ”

Extra testam visus Argonautæ habitator sepiæ speciem, sepiam præcipue octopodiam admodum refert: nec sane ab ea forma generali differt, nisi quod ad extremitates brachiorum duorum membranas ovatas habeat, quas cum super mare pacatum navigat, erigit, reliquis sex brachiis remigans. Fieri non potuit ut miranda res hominum oculos effugeret: ideoque a variis auctoribus descriptam legimus; nullis elegantius quam Plinio.

“ Inter præcipua autem miracula est, qui vocatur Nautilus, ab aliis Pompilos. Supinus in summa æquorum pervenit, ita se paulatim subrigens, ut emissæ omni per fistulam aqua, velut exoneratus sentina, facile naviget. Postea prima duo brachia retorquens, membranam inter illa miræ tenuitatis extendit; qua velificantे in aura, cæteris subremigans brachiis, media cæuda, ut gubernaculo, se regit. Ita vadit alto, Liburnicarum ludens imagine, et si quid pavoris interveniat, hausta se mergens aqua.”

Cavendum est hanc testam, quæ verus est Argonauta, cum Nautilo communiter dicto, seu Nautilo concamerato confundamus, qui generis est omnino distincti. Crescit Argonauta Argo ab una uncia ad sex vel etiam octo. Mare Mediterraneum nec non Indicum incolit.



THE
A R G O N A U T,
OR
P A P E R N A U T I L U S.



GENERIC CHARACTER.

Animal extremely resembling a *Sepia*.
Shell univalve, spiral, extremely thin.

SPECIFIC CHARACTER, &c.

ARGONAUT with whitish furrowed shell, with
the keel dentated on each side.

THE PAPER NAUTILUS.

NAUTILLE PAPIRACÉ.

Argenv. t. 5.

Notwithstanding the general similarity of structure which prevails amongst animals of the same tribe, there are yet some remarkable deviations from it. This is nowhere more conspicuous than in the testaceous tribe, in which the inhabitants of most of the Univalves bear a strong affinity to the genus *Limax*, or *Slug*, while those of almost all the Bivalves are distinguished by a striking similarity to the genera of *Tethys* and *Ascidia*. Amongst the instances of deviation from the general plan may be

be adduced the very remarkable and curious genus Argonauta or Paper-Nautilus, which is inhabited by an animal of an appearance so widely removed from those of most of the Univalves, as almost to make doubtful the reality of its being the genuine and proper inhabitant of the shell in which it resides. Linnæus accordingly has well observed, that unless the evidence of so many eye-witnesses had enforced belief, it might have been reasonably imagined that an animal so unlike the rest of the tribe, was only a usurper of the shell; in the same manner as the Cancer Diogenes and a few others, which take possession of such vacant shells as happen to suit their convenience. The inhabitant of the Argonauta, if seen detached from its shell, might pass for a real Sepia, and bears so great a resemblance to the Sepia octopodia or eight-armed Cuttle-fish, that the principal difference consists in its being furnished at the extremities of two of its arms with a pair of membranes of an oval form, which, during its occasional navigations on the surface of a calm sea, it raises upright and expands to the gale; while by the assistance of the six remaining arms it rows itself along. It seems impossible that so curious a spectacle could have escaped the particular observation of mankind. Accordingly we find it described by various authors: by none however more elegantly than by Pliny, whose short and beautiful description, has generally been quoted by modern writers.

“ But amongst the principal miracles of nature is the animal called Nautilus or Pompilos. It ascends to the surface of the sea in a supine posture, and gradually raising itself up, forces out by means of its tube all the water

water from the shell, in order that it may swim the more readily; then throwing back the two foremost arms, it displays between them a membrane of wonderful tenacity, which acts as a sail, while with the remaining arms it rows itself along; the tail in the middle acting as a helm to direct its course; and thus pursues its voyage like a little ship; and if alarmed by any appearance of danger, takes in the water and descends."

We must be careful not to confound this shell, which is the real and proper *Nautilus*, with the chambered or pearly *Nautilus*, which belongs to a very distinct genus. The *Argonauta Argo* is found of various sizes, from one to six or eight inches in length, or even larger. It is a native both of the Mediterranean and Indian seas.

SCORPIO AFER.



CHARACTER GENERICUS.

Pedes octo: insuper *Chelæ* duæ frontales.

Oculi octo: horum tres ad latus utrumque thoracis; duo in tergo.

Palpi duo, cheliformes.

Cauda elongata, articulata, terminata Mucrone arcuato.

Pectines duo subtilis, inter pectus et abdomen.

Lin. Syst. Nat. p. 1037.

CHARACTER SPECIFICUS, &c.

SCORPIO pectinibus 13-dentatis, manibus subcordatis pilosis.

Lin. Syst. Nat. p. 1038.

SCORPIO INDUS.

Degeer. inf. 7. p. 341. n. 3.

Inter omnia infecta hactenus cognita, quæ venenosæ et malignæ sunt indolis, Scorpiones primo semper numerari soliti sunt. Notandum tamen est vim veneni vel augeri vel minui pro diversa hominum vulnerorum idiosyncrasia, statuque ipsius animalis, majorive minorive impetu quo plaga infligitur. Concedendum etiam est vulgarem Scorpionem Europæum, multo magis

gis quam necesse est timeri, cuius ab aculeo vix aliquid mali potest evenire. At vero ingentes Africani Scorpiones, qualis est ille qui in tabula depingitur, vulnus infligere posse jure censetur, quod dolor acerrimus, virusque gravissimum solent comitari. Venenum per tria minutissima foramina prope apicem aculei exit, a summo fere apice et ab utroque latere. Notum est multum diuque dubitasse physicos fitne foramen necne, per quod venenum effunditur, in aranearum forcipibus. Similiter de foraminibus in scorpionis aculeo dubitatum est, immo pene ad lites perventum. Celeberrimus Redi, optimis licet vitris microscopicis tunc temporis instrutus, non potuit foramen discernere; qui tamen revera illud extare minime dubitavit, quippe qui ab aculeo compresso guttulam quasi liquoris albescens juxta apicem exprimi saepe viderat. Alii autem multi ullum esse foramen plane negarunt. Vallisneri et Leewenhoek foramina duo triangula clare visa descripserunt ab utroque latere prope apicem sita; alii tria detexerunt; unde patet Scorpionis aculeum venenum promptius efflare posse quam alius cuiusvis animalis. Pars illa quae Scorpionibus sub pectore sita est, quaeque more pectinis denticulata est, hoc ipso nomine *pectinis* a Linnæo designatur; qui etiam diversas species numero dentium in pectine distinguere conatus est. Fefellit tamen multos haec discriminandi methodus; pectinibus enim ejusdem speciei impar forsan sit numerus dentium; ideoque hoc solo signo species non possunt satis accurate dignosci. Species hic depicta est magnus *Scorpio Africanus*, a Linnæo *Scorpio Afer* nominatus. Color ejus communis est admodum fuscus, interdum pene nigricans. In magnam crescit molem, interdum multo majorem quam

repræ-

repræsentat tabula. Vivipari sunt Scorpiones, et plurimos uno partu edunt pullos, qui perfecte formati, nullam aliam mutationem subeunt, nisi forte quod aranearum more exuvias abjiciant. Quæ scripserunt varia et mira de his animalibus antiquiores physici, aniles sunt fabulæ, quas præsens ævum, cui omnigena affulsa scientia, ægre et indigne audiat. Hæc igitur putida et inania lubens taceo. Unum tamen e plurimis fas mihi fit feligere; Scorpionem nempe carbonibus ignitis circumdatum, cum nullum fibi exitum patere viderit, saluti tandem desperantem, sui ipsius aculei ictibus perire. Hanc fabulam, quasi fide dignam, plures etiam nunc temporis, ferio et graviter recitant, et pro unico suicidii exemplo inter inferiora animalia feligunt.

Fig. 2. Pectines.

THE
AFRICAN SCORPION.



GENERIC CHARACTER.

Eight *Legs*, besides the 2 frontal *Chelæ*.

Eight *Eyes*, viz. 3 on each side the thorax, and 2 on the back.

Two cheliform *Palpi* or feelers.

Tail long, jointed, terminated by a crooked *point*.

Two *Combs* beneath, between the thorax and abdomen.

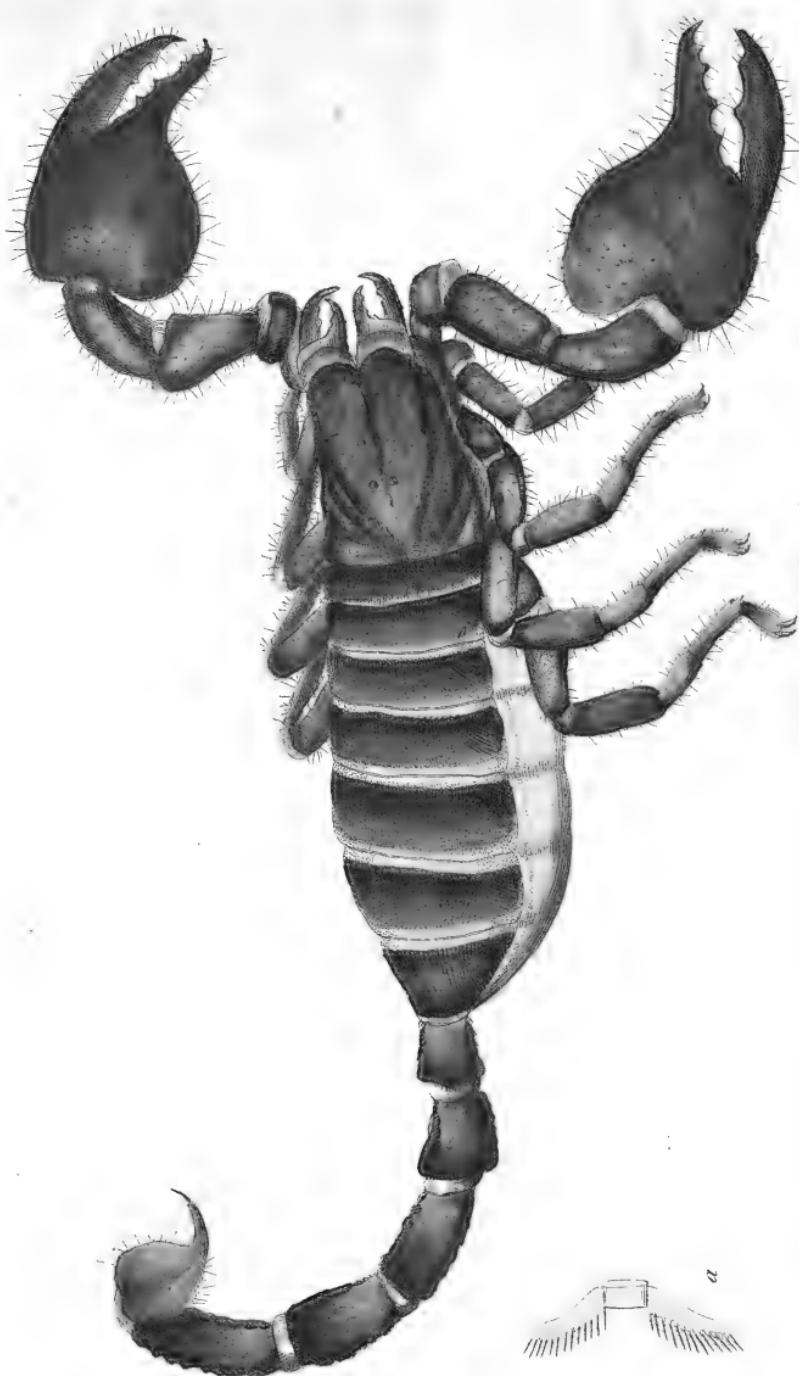
SPECIFIC CHARACTER, &c.

SCORPION with 13-toothed combs and somewhat heart-shaped hairy claws.

Swammerd. bibl. nat. t. 3. f. 3.

Roef. inf. 3. t. 65.

Scorpions may be considered as the most malignant and poisonous of all known insects. It is true that the effect of their sting will differ greatly according to the different circumstances of the constitution of the person receiving the wound, as well as of the state of the animal itself, and the degree of violence with which the wound was inflicted. It is also to be acknowledged that the common European Scorpion is not in general of



Scorpion. Illustration by G. R. F. 1826. (See page 102.)

of so terrible a nature as is commonly supposed, and it is but rarely that any bad consequences happen from its sting. But the large Scorpions of Africa, such as here represented, may well be supposed capable of inflicting a wound of the most severe pungency and of the most dreadful malignity. The poison is evacuated through three very small foramina near the tip of the sting, viz. one on each side the tip, and the other in the upper part. It is well known that a diversity of opinion has subsisted amongst authors relative to the slit or foramen in the fangs of spiders, through which their poison is evacuated. The same contrariety of sentiment takes place with respect to such a foramen in the Scorpion's sting. The celebrated Redi, assisted by the best microscopes he could procure, was not able to discover it; though he was well convinced of its existence from perceiving the minute drop of poison exude from near the tip of the sting. Others have denied the existence of the foramen; but Vallisneri and Leewenhoek have both described two foramina, viz. one on each side the tip, and which are of a shape inclining to triangular: besides these a third foramen has sometimes been seen; so that the sting of the Scorpion can with greater facility discharge its venom than that of any other animal. The part in Scorpions which is seated below the breast and is toothed in the manner of a comb, is in the Linnæan language termed the pecten; and Linnæus has endeavoured to distinguish the species of Scorpions from the number of teeth in this part; but this has been found a fallacious mark of distinction; since they vary in the number of teeth, and consequently no great certainty can be obtained from this character alone.

The

The very large species here represented is the great African Scorpion, or *Scorpio Afer* of Linnæus. Its general colour is a deep brown, nearly approaching in some specimens to black. It grows to a very large size; specimens being sometimes seen which far exceed in size the figure here represented. Scorpions are viviparous insects, and produce a very considerable number of young at once; which are completely shaped, and undergo no farther change, except (perhaps) casting their skin from time to time in the manner of spiders. Several fabulous anecdotes of these animals have been recorded by the older writers on natural history, which are totally unworthy of being related in the present enlightened age. One of the most remarkable of these legends is, that a Scorpion surrounded by live coals, finding no method to escape, grows desperate from its situation and stings itself to death. It is not uncommon to hear this quoted with serious credulity as the only instance of suicide amongst inferior animals.

Fig. 2. The pectinated parts or combs.

CERTHIA CARDINALIS.



CHARACTER GENERICUS.

Roftrum arcuatum, tenuē, subtrigonum, acutum.

Lingua acuta.

Pedes ambulatorii.

Lin. Syſt. Nat. p. 184.

CHARACTER SPECIFICUS, &c.

CERTHIA RUBERRIMA, alis caudaque nigris,
abdomine albido.

CERTHIA CARDINALIS?

Lath. ind. orn. p. 290.

CERTHIA RUBRA?

Gmel. Syſt. Nat. 1. p. 479.

Inter minimas numeratur hæc avicula sui generis, ficitque eam tabula magnitudine naturali. Forma generali Certhiæ cruentatæ Linnæi videtur simillimæ. In insulis aliquibus Australibus nasci creditur; quicquid autem ad peculiares illius mores attinet incognitum omne et incertum est.

THE
CARDINAL CREEPER.



GENERIC CHARACTER.

Bill slender, incurvated, sharp-pointed.

Tongue differing in shape in the different species.

Legs moderately stout.

Toes placed three before, and one behind; back toe large: claws hooked and long.

Linnaeus. Latham. Pennant.

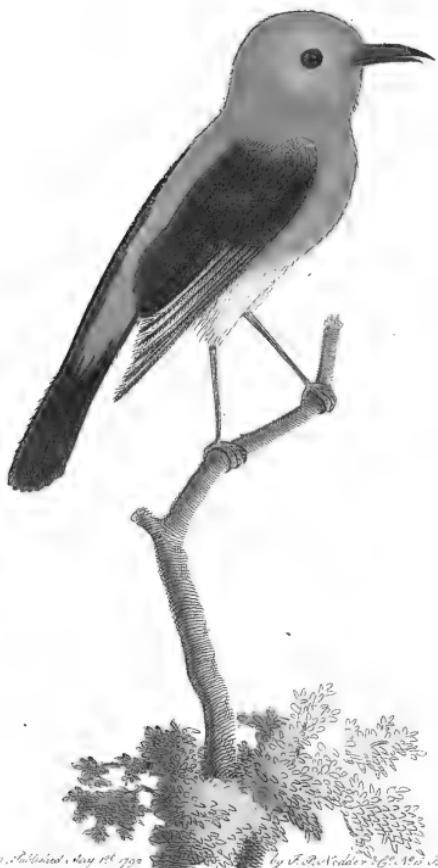
SPECIFIC CHARACTER, &c.

CARMINE-RED CREEPER, with black wings and tail, and whitish belly.

CARDINAL CREEPER.

Lath. Syn. 1 p. 733.

This bird may be numbered amongst the smallest of its genus, the figure representing it of its natural size. In its general appearance it seems extremely nearly allied to the *certhia cruentata* of Linnæus, or red-spotted creeper. It is supposed to be a native of some of the Southern islands, but its particular history seems to be unknown.



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London, Published, May 1st 1792 by J. R. Nodder, 36, C. & W. Brewer Street.

ASTERIAS CAPUT MEDUSÆ.



CHARACTER GENERICUS.

Corpus depresso: *crusta* subcoriacea, *tentaculis* muricata.

Os centrale, quinquevalve.

Lin. Syst. Nat. p. 1098.

CHARACTER SPECIFICUS, &c.

ASTERIAS radiis dichotomis, ore depresso.

ASTERIAS CAPUT MEDUSÆ.

Lin. Syst. Nat. p. 1101.

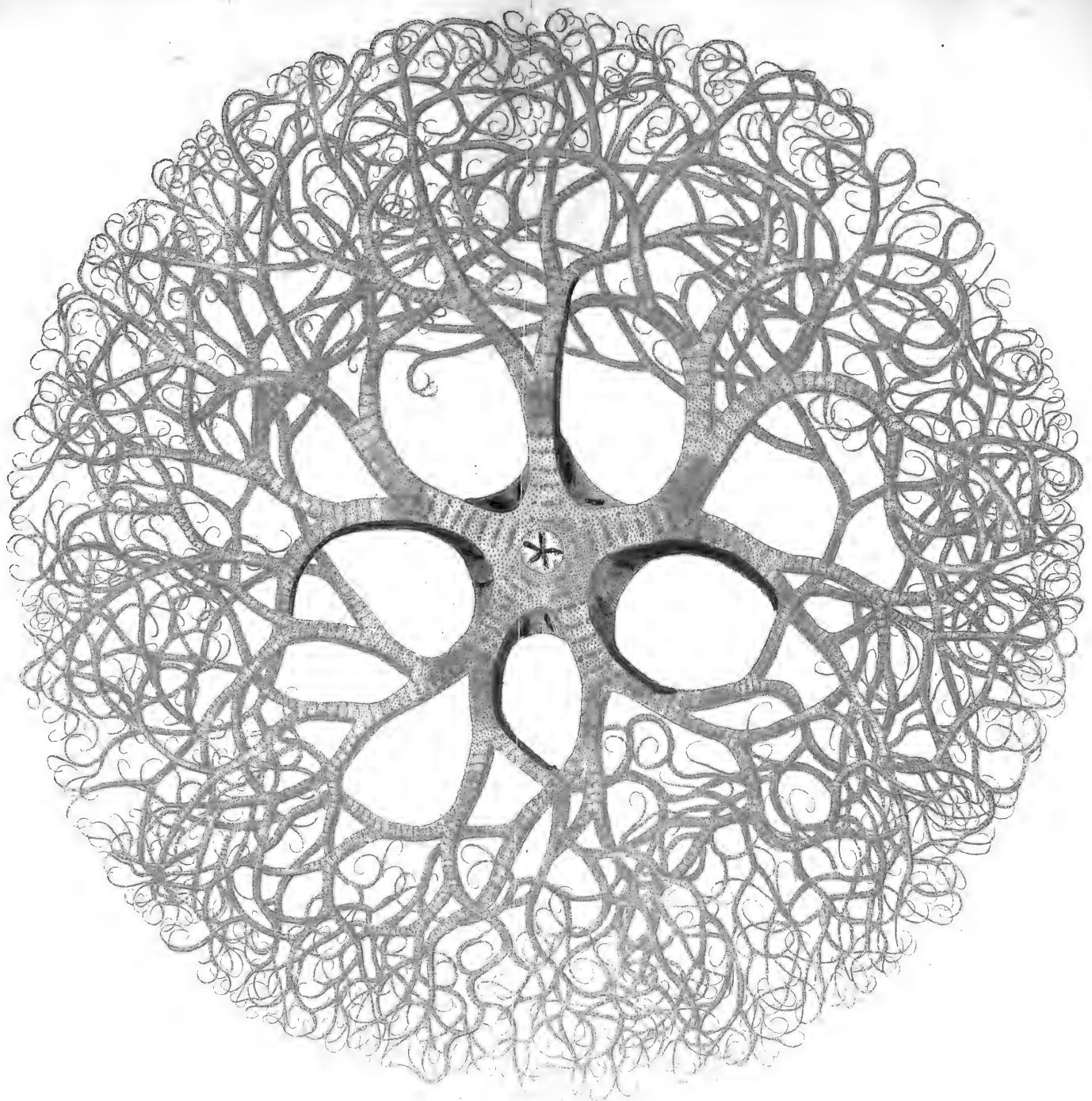
STELLA MARINA.

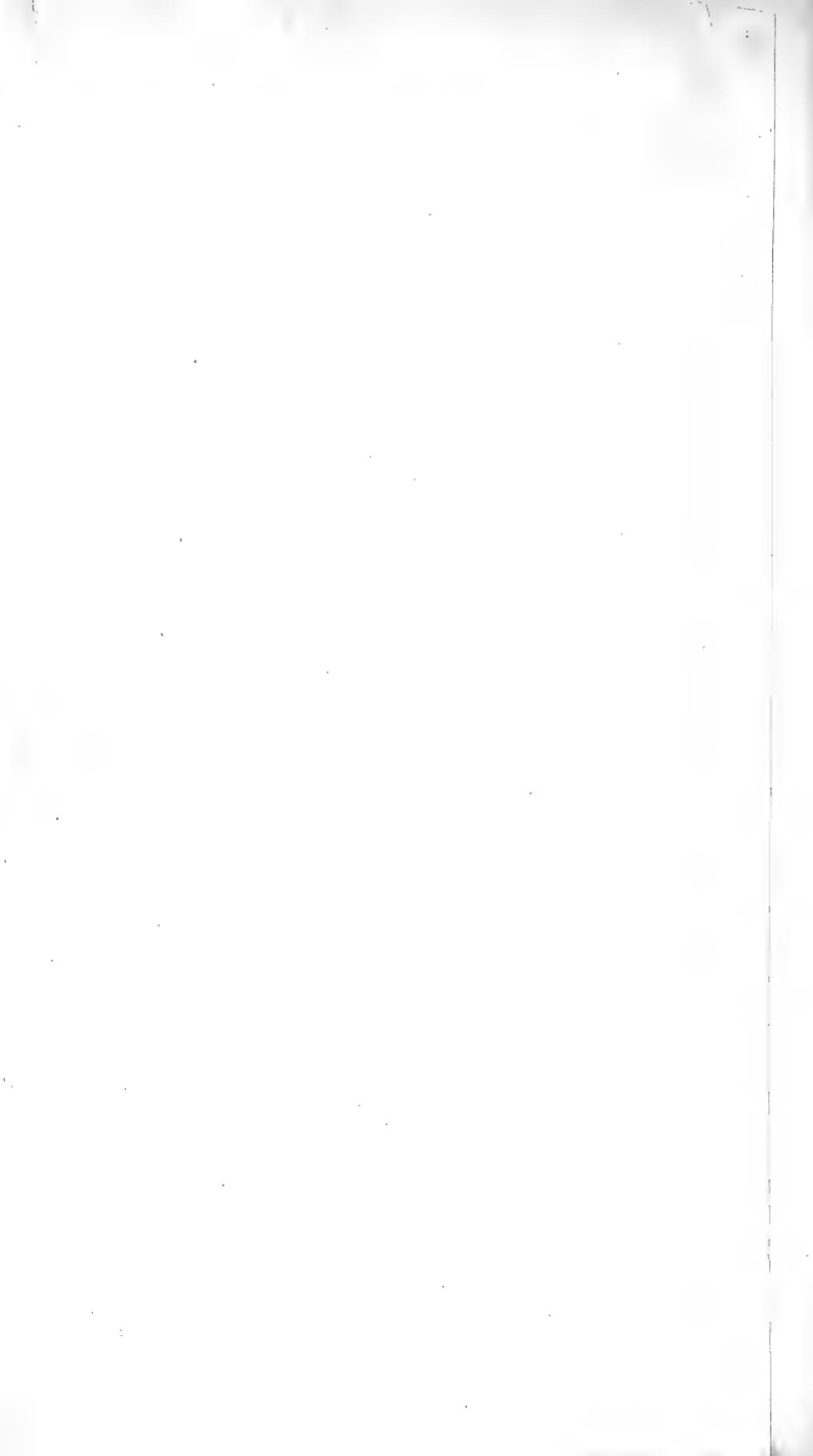
Fonst. inf. t. 26. f. 11.

Asteriæ, seu stellæ æquoreæ, ut vulgo nominantur, mirum et numerosum constituunt genus animalium marinorum. Specierum diversarum diversa admodum est facies externa. Pars maxima formæ sunt stellatæ, seu in quinque radios æquales divisæ: aliæ in plures radios, decem nempe vel tredecim: nonnullæ scabré et tuberosæ, nonnullæ lèves, aliæ denique spinosæ sunt. Species vero reliquis longe mirabilior Asterias caput Medusæ vocatur. Hæc a centro in quinque æquales et æquæ distantes radios geniculatos primum dividitur, quorum singuli dein in duos alios minores divaricant;

hi iterum paulo longiore intervallo in duos adhuc minores separantur; et hoc modo, divisionibus minoribus et numerosioribus, infinita pene serie sensim attenuata et multiplicata, distribuuntur membra, donec millia multa numero superent. Inde fit ut animal quasi rete sit vivum, nec immerito *rete mirabile* possit dici, cum illa quæ pro cibo natura voluit animalia, contractis subito innumeris ramulis amplectatur, et adempta aufugiendi potestate, misera devoret. Asteriæ facultatem repullulandi habent, membrumque aliquod vel casu vel vi abruptum aut avulsum progressu temporis renovatur. In oceano, præsertim prope littora cibi captandi gratia vagantur, animaliaque non tantum nuda et molliora sed etiam testis obiecta comedunt; dentibus enim duris et acutis spinas referentibus armantur, adeo sitis ut aculei omnes ad centrum convergant, dispariæ in diversis speciebus. Species hic depicta in oceano fere omni inventitur, præcipue in mari Mediterraneo. Colore variat: interdum pallida, seu rufo-albescens, interdum fuscescens, immo etiam penitus fusca reperitur. Asteriæ (fortasse,) ut plurimum, viviparae? sunt.







THE
BRANCHED ASTERIAS,
OR
MEDUSEAN STAR-FISH.



GENERIC CHARACTER.

Body depressed; covered with a coriaceous crust, muricated with tentacula.

Mouth central, with five valves.

SPECIFIC CHARACTER, &c.

ASTERIAS, with regularly-divided and subdivided branches, and depressed mouth.

MEDUSA-HEAD STAR-FISH.

BASKET STAR-FISH.

The Asteriæ or sea-stars, as they are generally called, form a very numerous and wonderful genus of marine animals. The several species differ greatly in appearance from each other: the greater number are of a stellated form, and are divided into five rays or processes; others are divided into a much greater number of rays, as ten, and thirteen. Some species are smooth, some tuberculated, others prickly. The species which of all others is most worthy of admiration is that called the Caput Medusæ, or Medusa's Head Star-fish: this

very

very curious animal is first divided into five equidistant, thickly-jointed processes, each of which is soon subdivided into two other smaller ones, and each of these, at a somewhat farther distance, into two others still smaller: this mode of regular subdivision is continued to a vast extent, and in the most beautiful gradation of minuteness, till at length the number of the extreme ramifications amounts to several thousands. By this most curious structure the animal becomes as it were a living net, and may well deserve the title of *rete mirabile*, and is capable of catching such creatures as are by nature destined for its prey, by the sudden contraction of all its innumerable ramifications, by which the unfortunate object is secured beyond all possibility of escape. The sea-stars have a very considerable degree of reproductive power, and if injured by accidental violence, or if one or more of their limbs or branches be torn or cut off, the creature will in time be furnished with new ones. They wander about the ocean, particularly near the shores, in quest of food, and prey not only on the softer animals, but even on the smaller shell-fish; and are armed for this purpose with hard and sharp teeth, resembling prickles, and situated in a circular form, with the points converging towards the opening of the mouth, and differing in number in the different species. The species here represented is not uncommon in most seas, and is frequently found in the Mediterranean. In colour it varies, being sometimes pale, or reddish white, and sometimes of a brown, more or less intense. The *Asteriæ* in general are viviparous? animals.

PTINUS FATIDICUS.



CHARACTER GENERICUS.

Antennæ filiformes; articulis ultimis majoribus.

Thorax subrotundus, immarginatus, caput excipiens.

Lin. Syft. Nat. p. 565.

CHARACTER SPECIFICUS, &c.

PTINUS fuscus subpilosus, griseo irregulariter maculofus.

DERMESTES TESSELATUS ??

Fabr. Syft. Ent. p. 56. *Sp. inf.* p. 65.

PTINUS PULSATOR ?

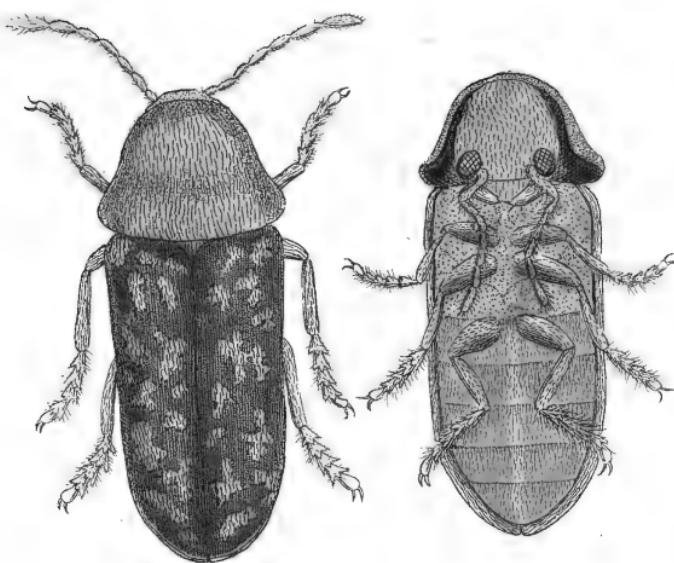
Gmel. Syft. Nat. p. 1605.

Ex ineptiis omnibus quæ imbecillos vulgi animos occuparunt, inanior nulla est quam mortisagi, ut dicitur, metus; qui parvulum licet insectum, ruris quietem perturbare, vanisque et falsis terroribus totum pagum solebat implere. Dominatur etiam nunc in populorum animis superstitionis ista sollicitudo, nequicunque fugare has tenebras quod jam fere per totum orbem diffunditur scientiae et veritatis lumen. Fatendum quidem est, illis qui in pane quotidiano comparando totum fere tempus terere

terere coguntur, deesse tum otium tum mentem ut in causam peculiaris alicujus sonitus accurate philosophiceque inquirant: mirum tamen est insectum commune non penitus cognosci, nec melius intelligi unde sonitus exoriatur.

Vere jam proiecto, mutuo se convocare solent formidata hæc animalcula, eodem fere modo quo aves; licet non sit vera vox, sed pulsatio capitis clypeati in duram aliquam substantiam. Audiuntur ictus septies, novies, vel undecies; quod ipsum fortasse majorem vulgo metum incutit. Repetuntur sonitus celeriter, incertis intervallis, et in domibus antiquis, ubi maxima est Mortisagorum copia, per totum fere diem possunt audiri; præsertim si calidior sit aeris temperies. Exacte imitari poteris hos ictus si unguem modice in mensam impingas. Cum colori ligni veteris simillimus sit color mortisagi, inquirentis oculus diu eluditur. Longus est circiter quadrantem unciæ, modica crassitie. Ad coleoptera pertinet, quorum nempe alæ elytris seu tegumentis corneis munitæ sunt; licet enim rarissime volet, volatilis est. Referri debet proculdubio ad genus *Ptinus* dictum. Miror nec inveniri eum in editione duodecima systematis naturæ Linnæi, nec in opere entomologico Fabricii, ni forte *Dermeles tessellatus* idem sit, quod si fiat, erravit Fabricius in genere. In volumine vigesimo, nec non in vigesimo secundo Actorum Anglicorum, nec male, describitur, additis observationibus celeberrimi Derhami, qui de animalculi forma moribusque recte differuit. Vereor ne quod falsum et ineptum sit asserere videar, cum dicam posse mortisagum, in pyxide servatum, ad id mansuetudinis et docilitatis perduci, ut mensæ impositus pulsanti alicui prompte respondeat.

respondeat. Cavendum est ne hoc insectum, (quod
verus est rusticorum mortisagus pulsatorius,) cum alio
confundamus, quod interdum eodem nomine dicitur,
quodque horologii more diu et sine ulla intermissione
sonum edit; pertinet enim hoc ad ordinem penitus di-
versum, nomine *Termitis pulsatorii* a Linnæo distinctum.
Claudet hanc Mortisagi descriptionem quod in opere
celeberrimo, *Pseudodoxia scilicet Epidemica*, observavit
vir doctissimus Thomas Brown. “ Qui ab animis po-
puli unicam hanc superstitionem posset evellere, ille
profecto a pavidis nutricum et aviarum capitibus sudoris
multum gelidi depelleret.”



London, published, May 4th 1792, by T. & J. Waller & Co. 19, & 21, Beaver Street.

THE
BEATING PTINUS,
OR
DEATH-WATCH.

GENERIC CHARACTER.

Antennæ filiform; the last joints larger than the others.

Thorax roundish, immarginated, receiving the head.

SPECIFIC CHARACTER, &c.

Dusky and somewhat hairy PTINUS, with irregular grey-brown spots.

THE DEATH-WATCH.

Phil. Trans. vol. 20. p. 376. vol. 22. p. 832.

Amongst the popular superstitions which the almost general illumination of the present century has not been able to obliterate, the dread of the Death-watch may well be considered as one of the most predominant; which, though nothing more than a small insect, still continues to disturb the habitations of rural tranquillity with groundless fears and absurd apprehensions.

It

It is not indeed to be imagined that they who are engaged in the more important cares of providing the immediate necessaries of life should have either leisure or inclination to investigate with philosophic exactness the causes of a particular sound: yet it must be allowed to be a very singular circumstance that an animal so common should not be more universally known, and the cause of the particular noise which it occasionally makes, be more generally understood. It is chiefly in the advanced state of spring that this alarming little being commences its sound; which is no other than the call or signal by which the insects of this species mutually attend to each other, and which may be considered as analogous to the call of birds; though not owing to the voice of the insect, but to its beating on any hard substance with the shield or fore part of its head. The prevailing number of distinct strokes which it beats, is from seven to nine or eleven, which very circumstance may perhaps still add in some degree to the ominous character which the animal bears amongst the vulgar. These sounds or beats are given in a pretty quick succession, and are repeated at uncertain intervals; and in old houses where the insects are numerous, may be heard almost every hour of the day; especially if the weather be warm. The sound exactly resembles that which may be made by beating moderately hard with the nail on a table.

The insect is of a colour so nearly resembling that of decayed wood, viz. an obscure greyish brown, that it may for a considerable time elude the search of the inquirer. It is about a quarter of an inch in length, and is moderately thick in proportion. It belongs
to

to the class of coleopterous insects, or such as have horny or shelly sheaths defending their wings, for it is a winged insect, though rarely seen in flight. The genus to which it unquestionably belongs is that of *Ptinus*; but it is remarkable that it does not occur in the twelfth edition of the *Systema Naturæ* of Linnæus; nor has Fabricius distinctly mentioned it in his entomological works, unless his *Dermestes tessellatus* be intended for the same insect, in which case he must have placed it in a wrong genus. In the twentieth and twenty-second volumes of the *Philosophical Transactions* it has been long ago described, and some very just observations made relative to its habits and general appearance, by the celebrated Mr. Derham, and it is extremely singular that so remarkable an insect should have almost escaped the notice of more modern entomologists. Ridiculous, and even incredible as it may appear, it is an animal that may in some measure be tamed; at least it may be so far familiarized as to be made to beat occasionally, by taking it out of its confinement and beating on a table or board, which it readily answers, and will continue to beat as often as required.

We must be careful not to confound this insect, which is the real Death-watch of the vulgar, (emphatically so called,) with another insect, which makes a sound like the ticking of a watch, and which continues its sound for a long time without intermission: it belongs to a totally different tribe from the Death-watch, and is the *Termes pulsatorium* of Linnæus. I shall conclude this description of the Death-watch by a sentence from the celebrated work *Pseudodoxia Epidemica*,

Epidemica, or Vulgar Errors, by the learned Sir Thomas Brown, who expresses himself in some such words as these. “ He that could eradicate this error from the minds of the people would save from many a cold sweat the meticulous heads of nurses and grandmothers.”

LOXIA CARDINALIS.



CHARACTER GENERICUS.

Rostrum conico-gibbum, frontis basi rotundatum
versus caput: *Mandibula* inferior margine
laterali inflexa.

Nares in basi rostri.

Lingua integra.

Lin. Syst. Nat. p. 299.

CHARACTER SPECIFICUS, &c.

LOXIA CRISTATA RUBRA, capistro nigro,
rostro pedibusque sanguineis.

Lin. Syst. Nat. p. 300.

COCCOTHRAUSTES RUBRA.

Catesb. Carol. 1. p. 38. t. 38.

COCCOTHRAUSTES VIRGINIANA CAR-
DINALIS dicta.

Briss. av. 3. p. 252.

LOXIA CARDINALIS.

Lath. ind. orn. p. 375.

E calidioribus Americæ Septentrionalis partibus in
Europam jamdudum illata est *Loxia Cardinalis*. Ob
colorem lautum splendidumque vocemque potentem et
suaviloquam apud nos magni semper habita est, nec de-
sunt qui eam ipsi lusciniæ vix ac ne vix cedere existi-
mant. Ingenio est alacri, vivido, docilique.

O

THE
CARDINAL GROSBEAK.



GENERIC CHARACTER.

Bill strong, thick, and convex.

Nostrils small.

Tongue truncated.

SPECIFIC CHARACTER, &c.

CRESTED RED GROSBEAK with black frontlet.

VIRGINIAN NIGHTINGALE.

Raii. Syn. p. 85.

Will. orn. p. 245. pl. 44.

CARDINAL GROSBEAK.

Lath. Syn. 2. p. 118.

The bird here figured is a native of the warmer parts of North America, from whence it was imported soon after the first discovery of that continent; and from the glowing splendor of its colour, and the extraordinary powers of its note, soon became a distinguished favorite in Europe. It is even by some considered as scarce inferior to the nightingale. It is a bird of a lively nature, and possesses a considerable degree of docility.



Printed in the United States of America by F. L. Nodder & Co., 100 Broadway, New York.

ISIS HIPPURIS.



CHARACTER GENERICUS.

Flores Hydræ, sparsi e floribus lateralibus.

Stirps radicata, lapidea, rigida, saepe articulata.

Lin. Syft. Nat. p. 1287.

CHARACTER SPECIFICUS, &c.

ISIS stirpe corallina, articulis striatis, geniculis attenuatis.

Lin. Syft. Nat. p. 1287.

ACCABARIUM ALBUM.

Rumpf. Amb. 6. p. 228. t. 84.

HIPPURIS SAXEA.

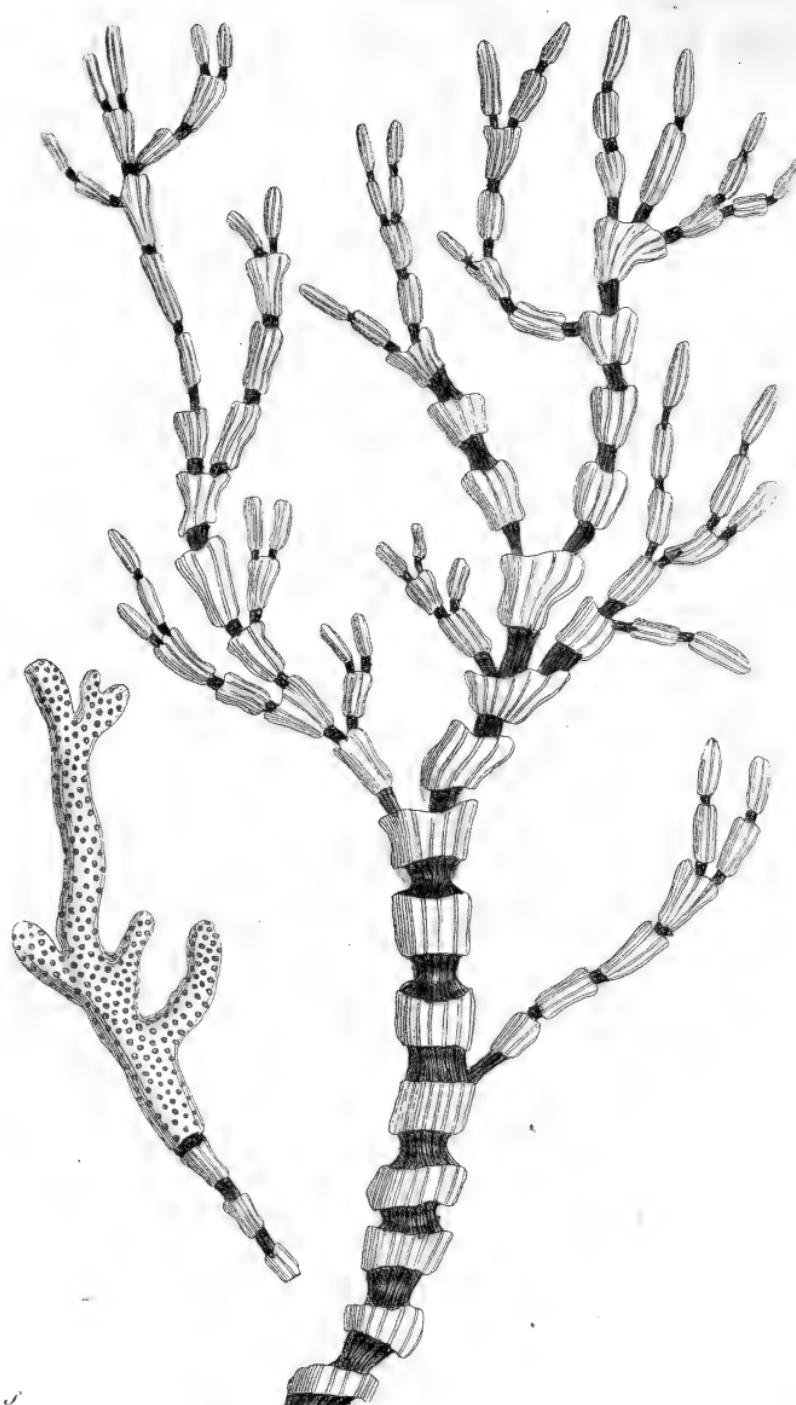
Clus. exot. 124.

LITHOPHYTON articulatum internodiis striatis.

Gualt. test. 118. fig. 16.

Jactare sane possunt perpaucā Lithophyta eleganter faciem quam hæc, de qua jam agitur, species. Ne quid enim dicam de ramulorum pulchritudine, bella est oppositio albarum expansarumque partium, nigrorumque quibus connectuntur geniculorum. Notandum tamen est pulchrum hunc aspectum non esse ipsius na-

turæ ; hæc enim vestiavit ifidem cortice albo et spongioso, foraminibus parvulis creberrime excavato, in quibus, cum adhuc recens sit lithophytum, habitant animalia polypos referentia, quæ ipsum corallium ædificasse creduntur. Crescit Ifis Hippuris in variis mundi partibus, in mari præcipue Indico. Diversæ extat magnitudinis, alta interdum paucas uncias, interdum duos fere pedes.



THE
BLACK-AND-WHITE ISIS,
OR
JOINTED CORAL.



GENERIC CHARACTER.

The *Coral* having the habit or appearance of a plant.

The *Stem* or internal part differing in the different species, and generally either of a horny or a stony appearance.

The *cortical part* soft, and inhabited by animals resembling polypes.

SPECIFIC CHARACTER, &c.

ISIS with white striated joints and black junctures.

PIED JOINTED CORAL.

BLACK AND WHITE JOINTED CORAL.

Ellis. Zooph. p. 105. t. 3.

Few, if any, of the Lithophytes can boast a more elegant appearance than the present species; which, exclusive of the neatness of its ramifications, is distinguished by the agreeable contrast between the white expanded parts and the black internodia by which they are

are united. It is to be observed, however, that this beautiful appearance is very different from that of the same coral in its natural state; in which it is coated over by a soft or spongy whitish part, thickly marked with small foramina, which in the recent Lithophyte are the habitations of so many animals resembling polypes; the supposed fabricators of the coral. The Ifis Hippuris is produced in several parts of the world, but is chiefly found in the Indian seas. It is found of various sizes, from a few inches to nearly two feet in height.

CERCARIA MUTABILIS.



CHARACTER GENERICUS.

Vermis nudo oculo inconspicuus, subpellucidus, caudatus.

CHARACTER SPECIFICUS, &c.

CERCARIA VIRIDIS, (interdum rubra,) corpore cylindraceo mutabili, cauda acuminata sub-bifida.

CERCARIA VIRIDIS ?

Müll. anim. infus. p. 126. tab. 19.
fig. 6—13.

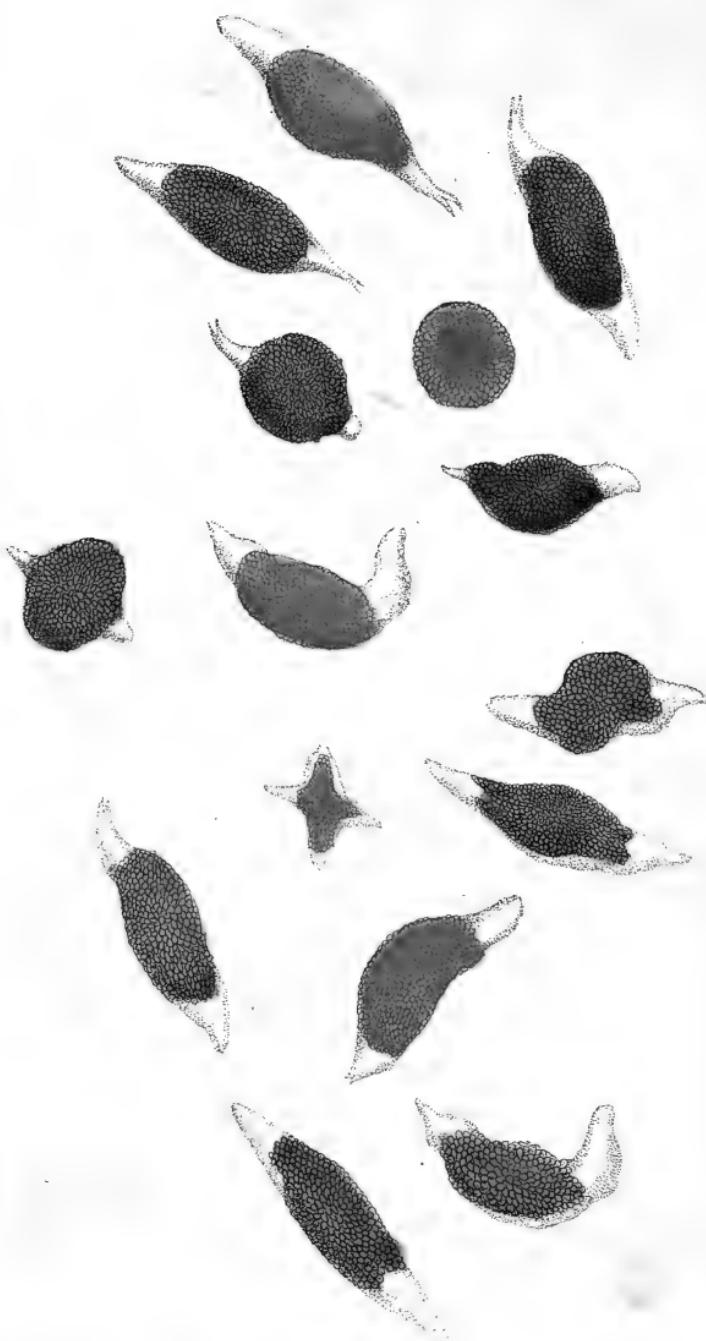
Ostenditur in tabula animalculum, situ varium, microscopio summopere auctum. Hujusmodi aestivis membranis densissima super paludes conglomerantur agmina, adeo ut interdum tota superficies rubra videatur seu viridis; alias ipsius aquæ corpus vel hoc vel illo colore non leviter tingatur. Forma limaci, motu hirudini similius est cercaria. Cum huic, ut et aliis multis animalculis, summa sit contractionis vis, hinc sit ut nunc fere in orbem colligatur, nunc in diversissimos longitudinis gradus ad libitum extendatur. Motu incedit tardiusculo; cumque natet penitus explicata, utraque extremitas pellucida videtur, corpusque granulis virentibus aut rubellis, piscium ova non male referentibus, refertum.

refertum. Caput seu anterior pars obtusior, cauda autem acuta, apicem interdum levissime bifurca; quod tamen vix ac ne vix conspici possit. Cum in reliquis omnibus prorsus convenient cercariæ in tabula depictæ, nisi quod hæ sint rubræ, illæ virides, nolumus ob solam coloris differentiam vere distinctas pronunciare. Virides sæpiissime mensibus Maii et Junii, interdum citius, mane plerumque et vespere aquarum stagnantium superficiem occupant, medio die fundum petentes. Rubræ, quæ longe rariores, aquas nonnunquam quasi in sanguinem convertunt; narrantque auctores universos populos hoc signo ingenti stupore perculsos: quod sene vulgo facile condonari possit; causam enim sæpiissime ignorant necesse est, cum ipsa animalcula sine microscopii ope non nisi acutissimo oculo conspici possint. Vidi egomet non semel magnam paludem una nocte rubore obductam et sanguine veluti perfusam, cuius die proxime elapso ne minimum erat vestigium. Notandum est etiam eodem fere modo, licet minus, decolorari paludes a monoculo pulice Linnæi, nec non a larva culicis communis, aliisque multis. Quid igitur mirum, anteactis temporibus, cum adhuc curta esset philosophia, vitriique optici ignoraretur usus, si homines vani et meticuloſi aquas sanguineum rubentes conspicati, Deos illico infestos et præsens aliquod exitium pertimuerint? Immo narrat celeberrimus Swammerdamus totam Lugduni civitatem hac ipsa re supra modum attonitam, aquis primo mane immenso (ut postea compertum est) animalculorum agmine quasi cruentatis: nec dubitamus quin species eadem fuerit cum hac nostra quam descripsimus. Hoc præterea omine turbatos Romanorum animos, inter alia quæ

Cæfaris

Cæfaris fatum aut præibant aut sequebantur portenta,
memoravit Virgilius.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare crux cessavit.”



THE
CHANGEABLE CERCARIA.



GENERIC CHARACTER.

Worm unobservable by the naked eye, somewhat pellucid, tailed.

SPECIFIC CHARACTER.

GREEN CERCARIA, (sometimes red,) with cylindric mutable body, and slightly bifid pointed tail.

The animalcule of which microscopical figures, very highly magnified, are represented on the annexed plate, is amongst those legions of animated beings which, in the warmer months, contribute to people the generality of stagnant waters; sometimes covering the whole surface with a continued sheet of a red or green colour, and sometimes diffusing a strong tinge of those colours throughout the whole mass or body of the water. The general shape of this animalcule is not much unlike that of a slug, but its motions are more analogous to those of a leech. In its postures it is infinitely variable, possessing, like many others of the animalcular

animalcular tribe, the highest degree of contractile power; in consequence of which it occasionally appears in all the various states of elongation and contraction represented in the plate; and not unfrequently reduces itself to a globular form. Its motions are rather slow than swift, and when swimming at full length it generally appears transparent at both extremities, while the body seems filled with a congeries of globules or grains of a green or reddish colour, and not ill resembling the spawn of fish. The head or fore-part is obtuse, but the tail or extremity is acute, and sometimes exhibits a slight appearance of bifurcation at the tip; but this is a particular which in general is scarce to be perceived. The difference in colour between these animalcules seems hardly sufficient to justify our regarding them as specifically distinct; since both the green and the red sort are so perfectly alike in other respects that no difference can be perceived between them. The green sort may be very frequently observed in most stagnant waters in the months of May and June, and sometimes much sooner, appearing commonly on the surface in the evening and early in the morning, and retiring towards the middle of the day to the bottom. The red variety is far less common, and the appearance which it sometimes exhibits is such as to alarm a superstitious mind with the idea of the water being tinged with blood: a panic of which numerous instances have been adduced by authors; and which is the more excusable in those who are ignorant of the cause, as the animalcules are so extremely minute as to be utterly imperceptible, (except to an uncommonly sharp

sharp eye,) without the assistance of a glass; so that even taking up the water and examining it affords to the vulgar no satisfactory elucidation. I remember to have more than once observed the whole surface of a large moat or pool completely covered in the space of a single night with this animalcule, when the day before there was not the least appearance of discoloration in the water: the whole surface appeared as if covered with florid blood. It should be observed that several other species of animalcules sometimes give the same tinge to stagnant waters, though in a far less striking degree: thus the monoculus pulex of Linnæus is frequently so numerous as to redden the water: the larva of the common gnat has also been known to produce a similar discoloration.

These are appearances which in less enlightened ages, unassisted by the microscope, have so often filled the minds of the people with the most terrible apprehensions, and have been regarded either as the precursors of some great calamity, or magnified into the immediate symptoms of heavenly displeasure. We are assured by the celebrated Swammerdam that the city of Leyden was in a state of consternation on discovering one morning that the waters of that place were apparently changed into blood; which, upon accurate examination, was found to be owing to no other cause than prodigious numbers of minute red animalcules, (in all probability of the very same species here represented.) For the effect which such appearances produced on the minds of the ancients, it may be sufficient to recal to the recollection of the reader the words of

Virgil,

Virgil, who, in his terrific list of prodigies which either preceded or accompanied the death of Julius, has not neglected to enumerate this phænomenon.

“ nec tempore eodem
Tristibus aut extis fibræ apparere minaces,
Aut puteis manare cruar cessavit.”

The trembling priest o'er boding victims stood,
And wells, portentous omen! flow'd with blood.

ANAS PLUTONIA.



CHARACTER GENERICUS.

Rostrum lamelloso-dentatum, convexum, obtusum.
Lingua ciliata, obtusa.

Lin. Syft. Nat. p. 194.

CHARACTER SPECIFICUS.

ANAS NIGRA, remigibus albis.

ANAS ATRATA?

Lath. ind. orn. p. 834.

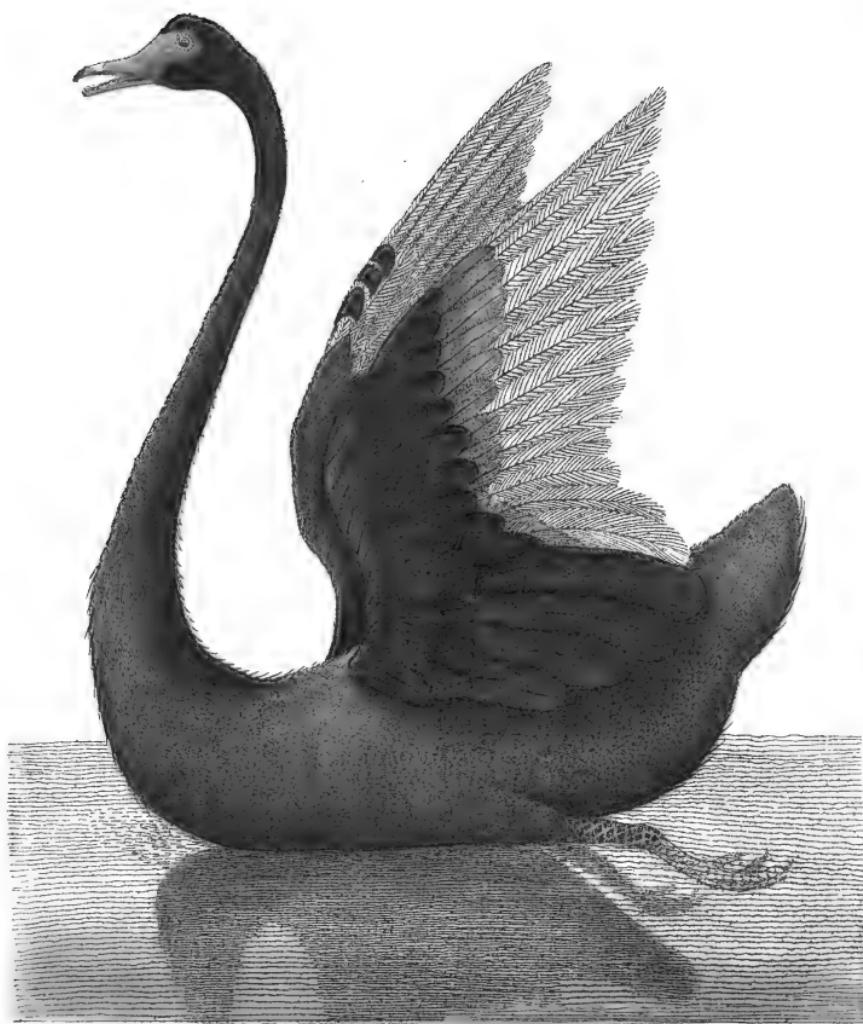
Cum ipsa nive candidior sit cycnus communis, colorque ei constans semper fuerit et perpetuus, mirum fortasse sonet populi auribus qui jam olim in proverbium abiit *cycnus niger*. Nemo tamen fanus unquam dubitaverit quin e numerosissimo genere anatino exflare posset alicubi in terris species quæpiam distincta, quæ forma licet modoque vivendi cycno candido simillima, a natura tamen colorem prorsus contrarium fortita sit. Hæc jam tandem comperta est in Nova Hollandia insulisque adjacentibus, quamque tabula fideliter depictam ostendit. Si nigredinem excipias, convenit huic in reliquis fere omnibus cum cycno Europæo. Idem ei natanti decor, eadem nec ingrata superbia, variique corporis

P

situs.

fitus. Tota avis, remigibus albis exceptis, coloris est aterrimi. Rostrum amoenissime rubrum, cute impluni, quæ basin cingit, super frontem late et ultra oculos excurrente. Apici mandibulæ superioris nigricanti prope adjacet macula flava. Crura nigra, pedes paulo pallidiores.

Amicissime nobiscum communicavit exemplum fideliter depictum, unde figuram hanc nostram mutuati sumus, Thomas Wilson armiger, quod ei nuperrime miserat cum aliis multis hujusmodi cimeliis Dominus White, Novæ Hollandiæ chirurgus præcipuus.



London. Published July 1st 1792. by F. P. Nodder, 52, No^o 5, Brewer Street.

THE
BLACK SWAN.

GENERIC CHARACTER.

Bill broad and flattened; the edges marked with sharp lamellæ.

Tongue broad and ciliated at the edges.

SPECIFIC CHARACTER.

BLACK SWAN with white remiges.

To vulgar ears a black swan has the sound of a miracle: but this arises merely from annexing the proverbial name to the common swan, so emphatically distinguished by its constant snowy plumage, from which it was never known to vary: but no one could ever rationally be supposed to call in question the possible existence of some distinct species of this numerous genus, which, however nearly allied in point of size and habit to the common swan, might yet be naturally black. In fact such a species is now discovered. It is a native of New Holland, and the neighbouring islands, and is accurately represented on the plate annexed. In general appearance it bears the most striking resemblance to the common swan, and is remarkable for all those gracefully-varying attitudes which so eminently

distinguish the European species. The whole bird, except the long wing-feathers, which are white, is of the deepest and fullest black: the beak is of a fine red, and the skin surrounding the base is continued high over the forehead and beyond the eyes: the tip of the upper mandible is blackish, and near the tip is a spot of yellow. The legs are black; the feet somewhat paler.

The original drawing of this most curious bird, accurately taken from the life, and from which the present figure is copied, was obligingly communicated by Thomas Wilson, Esq. of Gower Street, to whom it was sent, together with many other non-descript animals, &c. by Mr. White, chief surgeon to the English settlement at New South Wales.

MYRMECOPHAGA ACULEATA.



CHARACTER GENERICUS.

Dentes nulli.

Lingua teres, extenfilis.

Os angustatum in rostrum.

Corpus (plerisque) pilis tectum.

CHARACTER SPECIFICUS.

MYRMECOPHAGA ACULEATA, cauda brevissima.

Digna est quæ penitus examinetur hæc species, non modo quod nova prorsus sit et adhuc inaudita, sed quod in ea insigne detur exemplum miræ istius gradationis qua genera diversissima interdum fibi invicem approxinant. Vinculum videtur esse hæc quo connectuntur genera satis distincta *Hystricis* et *Myrmecophagæ*, cum enim huic sit facie vestituque similius, illius habet rostrum verosque characteres. Pedem circiter unum longa est, quatenus a speciminibus adhuc visis colligi possit: deest igitur figuræ nostræ plusquam dimidia pars magnitudinis naturalis. Totum corpus superius cum cauda spinis congettetur validis et longioribus, quales omnino sunt *hystricis vulgaris*, nisi quod vice circulorum qui alternatim albi nigrique, plerumque albeant, apicibus altius nigro tinctis, quodque albedo

albedo a nigredine separetur annulo parvo sordide aurantio. Aliæ vero spinæ totæ albent, si excipias extremitates levissime nigricantes. Caput, crura, corporisque partes inferiores e fusco nigricant, vesiunturque pilis seu fetis potius densissimis. Caudæ brevioris apicem denudatæ et paululum complanatæ superficies superior spinis contegitur perpendicularibus, illas saltem longitudine æquantibus quæ in dorso cernuntur. Rostrum longum, nudum, nigrum, tubulatum, eodem modo formatum quo rostrum *Myrmecophagæ jubatæ*, in apice rectum habet minimum, unde lingua lumbriciformis longe protruditur, qualis est etiam Myrmecophagarum. Nares parvæ, ad extreum in rostri sitæ. Oculi minimi, nigri, iride cærulea. Crura brevissima, crassissima, digitis quinque instructa. Pedum anticorum digitis sunt ungues quinque validissimi, longi, obtusiusculi, nigricantes: posticorum quatuor tantum (pollex enim cæteris latior, ungue caret,) quique differunt inter se: prior scilicet est longissimus, paululum curvatus, et acutus; secundus paulo brevior, sed similiter formatus; reliqui duo multo breviores, aliquatulum curvi, et obtusiusculi. Vivit proculdubio hæc species more aliarum Myrmecophagarum, in tumulo enim quem congefferant formicæ primo depensa est, ideoque nomine *Hystericis formicariæ* distincta. Ad nos a Nova Hollandia allata est.

Cum nuperrime detectum sit hoc animal, neminem scientia naturali vel leviter imbutum latere possit minus quam antea convenire Linnæanos characteres generi *Myrmecophagæ*. Cum igitur quæ in generibus *Manis* et *Myrmecophagæ* continentur animalia vescitu solo differant, huic enim corpus squamosum, illi pilosum; satius forsan

forsan foret duo hæc genera conjungere, annumerata iis
novissima hac specie, et ex parte characterum dicere
Corpus vel pilis vel squamis vel aculeis vestitum: ni no-
vum omnino genus instituatur, a generibus *Manis* et
Myrmecophagæ in hoc tantum discrepans, quod nec
squamis, nec pilis, sed aculeis contegatur.

THE
PORCUPINE ANT-EATER.



GENERIC CHARACTER.

Body (in most species) covered with hair.

Snout tubular; mouth small; no teeth.

Tongue cylindric, long, extensile.

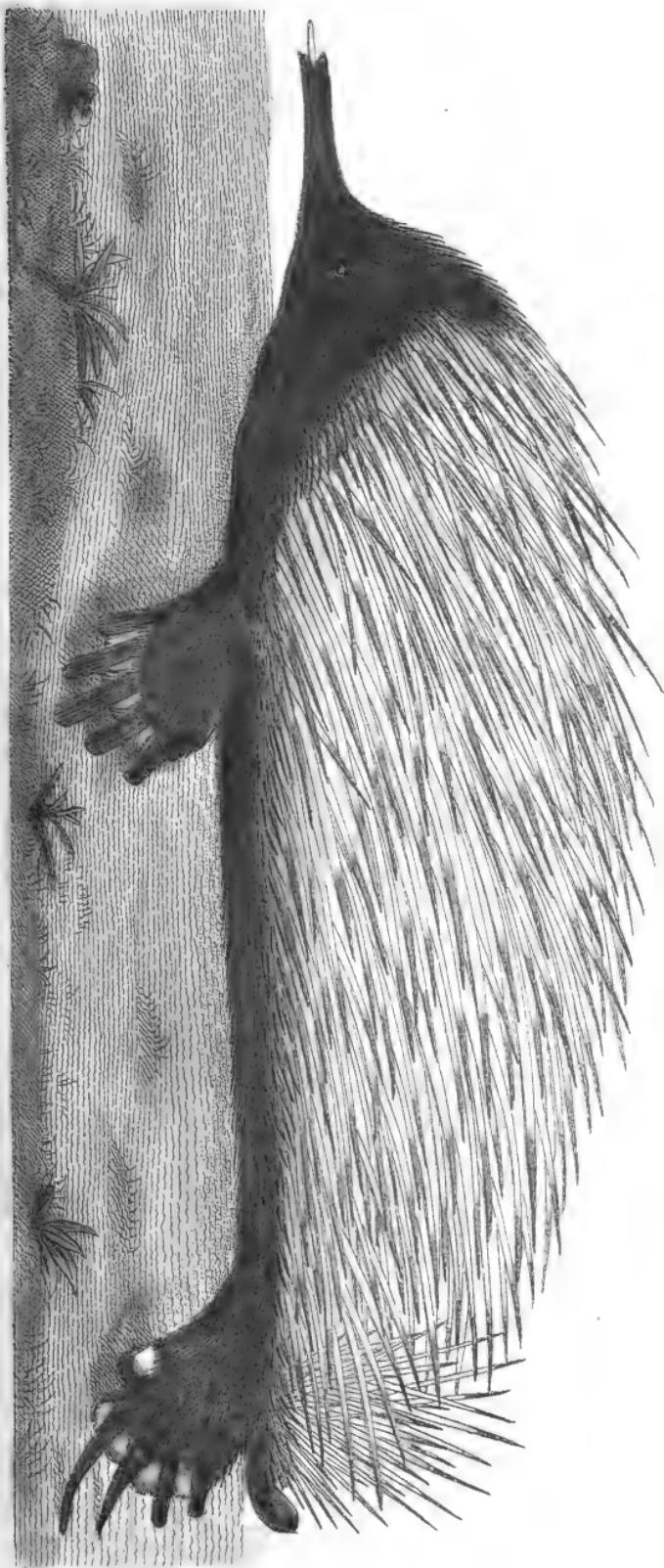
SPECIFIC CHARACTER.

SPINY ANT-EATER with very short tail.

This extraordinary animal may well be considered amongst the most curious and interesting quadrupeds yet discovered; since it is not only an absolutely new and hitherto unknown species, but is also a most striking instance of that beautiful gradation, so frequently observed in the animal kingdom, by which creatures of one tribe or genus approach to those of a very different one. It forms a connecting link between the very distant genera of *Hystrix* and *Myrmecophaga*; having the external coating and general aspect of the one, with the mouth and peculiar generic characters of the other. This animal, so far as can be judged from the specimens hitherto observed, is about a foot in length: the figure consequently represents it of nearly half the natural size. The whole upper parts of the body and tail

are

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are thickly coated with strong, sharp spines, of a considerable length, and perfectly resembling those of the common porcupine, except that instead of being annulated with several alternate rings of black and white, as in that animal, they are mostly white, with black tips, the colour running down to some little distance on the quill, and being separated from the white part by a circle of dull orange: others are entirely white, or at least have but a slight appearance of black towards the tips. The head, legs, and whole under parts of the body are of a deep brown or sable, thickly coated with strong, close-set, bristly hair. The tail is short, bare, slightly flattened at the tip, and coated on the upper part of the base, with spines at least equal in length to those of the back, and seated perpendicularly upwards. The snout is long and tubular, and perfectly resembles in structure that of the *Myrmecophaga jubata*, or great ant-eater; having only a very small opening or rictus at the tip, from whence is protruded a long lumbriciform tongue, as in the ant-eaters. The nostrils are small, and seated near the extremity of the snout. The eyes are very small, and black, with a pale-blue iris. The legs are very short and thick, and are each furnished with five rounded broad toes: on the fore feet are five very strong, long, and blunt claws, of a black colour; seated on each toe. On the hind-feet are only four claws, the thumb, which is broader than the rest of the toes, being destitute of a claw. The first claw on the hind-feet is extremely long, somewhat curved, and sharp-pointed; the next rather shorter, but of similar appearance; the two remaining ones far shorter, very slightly curved, and not sharp-pointed.

In

In its mode of life this animal beyond a doubt resembles the Myrmecophagæ, having been found in the midst of an ant-hill; for which reason it was named by its first discoverers the ant-eating porcupine. It is a native of New Holland.

It cannot escape the observation of every scientific naturalist, that in consequence of the discovery of this curious animal, the Linnæan character of the genus *Myrmecophaga* is in part rendered inapplicable. Since therefore the animals in the genera of *Myrmecophaga* and *Manis* differ only in the external coating of the body, the former being covered with hair and the latter with scales, it would perhaps be not improper to conjoin the two genera, to add this as a new species, and to give as part of the generic character *Corpus pilis, squamis, vel aculeis tectum*. But if this be not done, it would perhaps be proper to make this animal constitute a new genus, which would differ from the genera of *Manis* and *Myrmecophaga* in having the body coated with aculei, instead of hair as in the *Myrmecophaga*, or of scales as in the *Manis*.

CICADA PLEBEIA.



CHARACTER GENERICUS.

Rostrum inflexum.

Antennæ setaceæ.

Alæ quatuor, membranaceæ, deflexæ.

Pedes (plerisque) saltatorii.

Lin. Syft. Nat. p. 705.

CHARACTER SPECIFICUS, &c.

CICADA scutelli apice bidentato, elytris anastomosibus quatuor, lineisque sex ferrugineis.

Lin. Syft. Nat. p. 707.

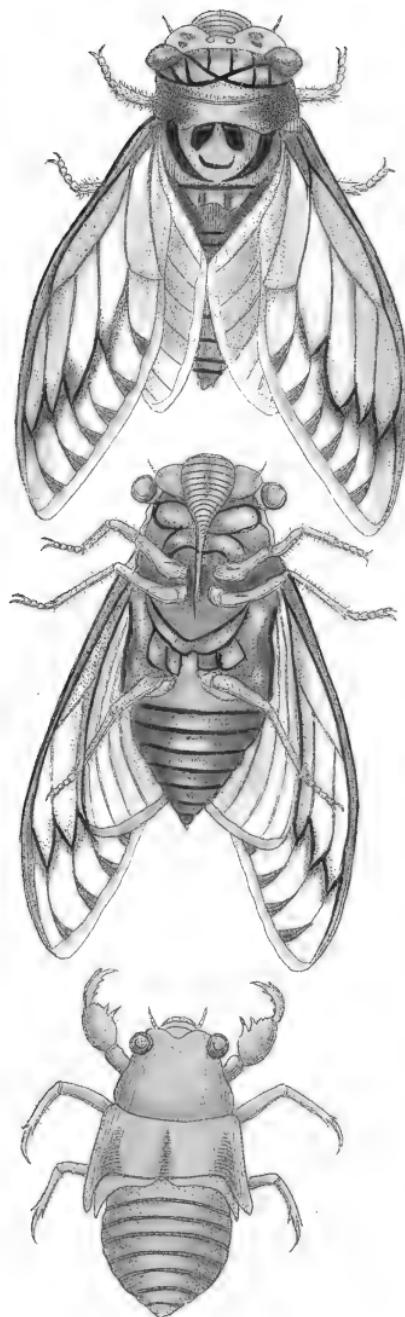
Mouff. inf. 127.

Adr. inf. 307.

Matth. Diosc. 264.

Cicada, quam sæpiissime memorant poetæ antiqui, quamque communiter cum grylo vulgari seu campestris confundunt plerique interpretes, Europam incolit calidorem, in Italia et Græcia, ut plurimum reperta. Species notissima, seu cicada plebeia Linnæi quam depinximus, æstate calidissima conspicitur, ramoque insidens per totum fere diem stridulum canit et acutum. In Italia est altera species, (quæ cicada orni Linnæi) huic simillima, sed minor. Majorum cicadarum variæ sunt

funt species, adeo inter se similes, ut revera licet diversæ, easdem tamen putarent incuriosi spectatores. Omnes ab ovis originem ducunt, quæ deponunt parentes in arborum radicibus juxta terram, quæque in larvas excluduntur, a veteribus scriptoribus Tettigometrarum nomine distinctas. Peracto duorum annorum spatio, exuvias ponunt larvæ, perfectumque nascitur insectum. Figura tertia Tettigometram seu larvam cicadæ plebeiæ monstrat. Notandum est in Britannia plurimas esse cicadarum species; parvulæ tamen sunt, nec vocem seu stridorem notabilem emittunt.



PLATE

London: Printed July 2^d 1791, by G. & P. Vizetley Esq; 10, Brewer Street.

THE
COMMON CICADA.



GENERIC CHARACTER.

Beak inflected.

Antennæ setaceous.

Wings four, membranaceous, deflected.

Feet (in most species) formed for leaping.

SPECIFIC CHARACTER.

CICADA with the scutellum bidentated at the tip, the elytræ marked with four anastomoses and six ferruginous lines.

The Cicada, so often commemorated by the ancient poets, and so generally confounded by the major part of translators with the grasshopper, is a native of the warmer parts of Europe, and is particularly plentiful in Italy and Greece. The most common species, or cicada plebeia, here represented, appears in the hotter months of summer, and continues its shrill chirping during the greatest part of the day; sitting amongst the leaves of trees. In Italy there is another species, (the cicada orni, Lin:) which bears a very great general resemblance to the former but is considerably less: indeed amongst the larger cicadæ there are several sorts, which,

which, though really distinct, are yet so very nearly allied to each other, as to be easily regarded, on a cursory view, as the same species. All the cicadæ proceed from eggs, which are deposited by the parent insects in and about the roots of trees, near the ground: they hatch into larvae, which, when grown to a certain size, are the *Tettigometræ* of the older writers. These larvæ, after having continued in this state two years, cast their skins and produce the complete insect. Fig. 3. shews the larva or *Tettigometra* of the *cicada plebeia*. I should observe that in our own country we have several species of this genus, which however are extremely small, and are not distinguished by any sound sufficient to excite attention.

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